



#### EDWARDS'S

# BOTANICAL REGISTER:

OR,

#### ORNAMENTAL FLOWER-GARDEN

AND SHRUBBERY:

BOLAT CAL BARDEN

CONSISTING OF

# COLOURED FIGURES OF PLANTS AND SHRUBS,

CULTIVATED IN BRITISH GARDENS;

ACCOMPANIED BY THEIR

Wistory, Best Method of Treatment in Cultibation, Propagation, &c.

CONTINUED

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&c. &c. &c.

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—viret semper—nec fronde caducâ Carpitur.

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# AUG 7- 1923

#### CENOTHERA humifusa.

Pencilled Evening Primrose.

EURAPY NEW YORK BOLANICAE BARDEN

Nut. ord. Onagrace.e. ŒNOTHERA.—Suprà, vol. 2, fol. 147.

**(E.** humifusa; tota villosa, caulibus prostratis, foliis ex ovata basi angustis acuminatis dentatis, spicis foliosis terminalibus, calycis tubo gracili ovario duplo longiore, petalis bilobis venosis staminibus longioribus, stigmatis lobis brevibus cruciatis, capsulis prismaticis.

Œ. humifusa. Nutt. gen. amer. 245.

CE. concinna. Don in Brit. Fl. Gard. n. s. t. 183.

Boisduvalia concinua. Spach in Ann. des sc. ser. 2. 4. 161.

Annua, cinerascens, undique pube brevi patente vestita. Caules procumbentes, subsimpliciter ramosi, pallidè virides. Folia sessilia, basi ovata, angusta, acuminata, paululum recurva, dentata; superiora bractescentia integriora. Tubus calycis sanguineus, gracilis, limbo ovarioque duplo longior; limbus 4-partitus viridis. Petala obcordata, venosa, diurna, sub sole pallida, in umbra amænè rosea. Stamina omnia fertilia, alterna breviora. Stylus filiformis staminibus longior, decolor; stigma breviter quadrilobum. Semina oblonga, fusco-olivacea, glabra, subangulata; testá lævi tenui.

A pretty little hardy annual, for a specimen of which I am indebted to the kindness of Mrs. Marryat, who originally received the seeds from Mr. Lambert. In the Garden at Wimbledon it creeps close to the ground, forming a plant a foot in diameter, and shedding its seeds very freely.

According to Professor Don this is a Chilian plant, introduced by Mr. Cuming. But I do not find any thing like it among the rich Chilian Herbaria collected by Cuming, Macrae, Mathews, Bridges, and others; Mr. Cruckshanks, who is so well acquainted with the Chilian flora, is

equally a stranger to it; and I suspect some mistake on the part of Mr. Lambert's gardener. In fact, it appears to be the Œ. humifusa of Nuttall, a species originally discovered on the sea-coast near Cumberland Island in Florida, by Dr. Baldwin. When exposed to much light its flowers are a very pale delicate flesh colour, but if they are made to expand in a cool shady place, such, for instance, as a sitting room with a northern aspect, they acquire the beautiful pink of the accompanying plate.

The genus Œnothera has lately been the subject of what is called a revision, by one Mr. Spach, a German Botanist resident at Paris. This writer appears to belong to that school which takes for the fundamental article of its faith, the belief that an occasional subversion of the established nomenclature of the best known parts of systematic Natural History, is the surest way-not to advance the science but—to carve out a great reputation for themselves; who think it far more pleasant to see their own names attached to a plant, than the name of its discoverer; who have a happy knack of appropriating to themselves, by an ingenious sort of hocus pocus, the credit which in reality belongs to others, and who contrive, by what they are pleased to call remodelling a genus, to push themselves into what the uninitiated imagine to be the high places of science. One of the first gentlemen who took up this trade in Botany was, I think, a certain Mr. Schreber, who, by changing all the generic names of the plants collected in Cayenne by Fusce Aublet, succeeded for a time in getting to himself the credit of the unfortunate Frenchman's discoveries. So meritorious an example was not likely to want imitators, and accordingly, from that day to this, the world has been occasionally afflicted by the visitations of scientific putters-torights, who have bedizened and bedecked poor Botany after such a fashion, that her nearest friends cannot recognise her, and can hardly believe her to be the same science, whose acquaintance they have been cultivating all their lives. Mr. Spach is no unworthy disciple of this "philoseautic" school, as I now proceed to shew.

Most people who know any thing of Botany are acquainted with such plants as Œnothera macrocarpa of *Pursh*, Œ. biennis of *Linnæus*,

CE. acaulis of Cavanilles, CE. rosea of Aiton, CE. fruticosa of Sims, or CE. speciosa of Nuttall. But no such species are to be found in the book of Mr. Spach, who has been patting Œnothera to rights. Upon looking, however, more narrowly after our old acquaintances, we at last discover them figuring away under the names of Megapterium Nuttallianum of Spach, Onagra vulgaris of Spach, Lavauxia mutica of Spach, Hartmannia gauroides of Spach, Kneiffia suffruticosa of Spach, and Xylopleurum Nuttallii of Spach; and in like manner, our friends Fuchsia lycioides, thymifolia and microphylla have been spirited away, and their places taken by Kierschliegeria lycioides of Spach, Lyciopsis thymifolia of Spach, and Brebissonia microphylla of Spach. And upon what grounds, it will be asked, is all this improvement effected? Why upon this? Mr. Spach has made the prodigious discovery that in some species of Enothera the seeds have a thicker skin than in others, that their skin is even occasionally pitted; he has further ascertained that the seed vessel is not always of the same shape, but that it is narrow in some and broad in others, tough in some and tender in others, now broadest at one end now at the other; and he has even found out that some Enotheras have 8 ribs, others 12, and others only 4 in their Armed with this intelligence this clever gentleman snatches up his critical lance, jumps into the saddle, puts spurs to his Rosinante, and rides full tilt at Œnothera, whom he unseats at the first atteinte, and then cuts and hacks into a dozen pieces. No one can deny that this is brave work; all honour to Mr. Spach for his feat.

But to be serious—can any thing be well imagined more perfectly absurd or more pregnant with mischief than such doings as If there is any meaning in the word genus, and if it has any intelligible application, it must be the representation of some special simple type of organization which differs from all other types: just as an order is the representation of some more compound type of organization. Thus a Strawberry is a Rosaceous plant, in which a tendency to become excessively succulent and saccharine exists in the receptacle of the achenia; a Potentilla is a Rosaccous plant in which no kind of tendency exists to such an enlargement of the receptacle, and the differences are constant; again a Rubus differs from both these genera in the tendency to enlargement and the formation of saccharine matter existing in the achenia, and not in the receptacle, and this is accompanied by the suppression of one series of the calycine segments. These are clear, plain, intelligible differences, each of which constitutes a separate type of structure. is one seed being less pitted (scrobiculate) than another, a different type of structure? Or having its seed coat a little thicker? Or are we to consider an obovate capsule a different type of structure

from an ovate one? Or a thin-sided pericarp a different type of structure from a thicker-sided one? Mr. Spach says yes; and upon such differences is the larger part of his new genera (!!) proposed. To me, however, and I should hope to the greater number of Botanists who have any idea what general views are, such opinions appear contrary to common sense. If the example of writers like Mr. Spach were to be followed, systematic Botany would be resolved into its original elements: books would consist of mere masses of species; all power of analysis would be at an end, and the great objects of classification would be annihilated.

A proneness to disturb existing nomenclature is very commonly alleged against modern Botanists in a mass, and is looked upon by the Public, who are much inconvenienced by it, as a besetting sin in modern Natural History. That there is a good deal of prejudice, much misconception, and no small degree of ignorance in this popular outcry, I or any Botanist could easily prove; for it is impossible that, in a science of observation, the ideas of any man should remain fixed and immoveable, unless, indeed, in the case of those gentlemen whom Science every now and then leaves so far behind her, that, in the end, they are well nigh lost sight of altogether. As new objects are discovered the necessity of new systematic combinations becomes evident, and the ideas of Botanists change accordingly, the visible result of which is occasional changes in nomenclature. Genera are thus materially affected from time to time, and new species as they are discovered render the creation of new genera necessary, into which some of the species of the old genera are very often transferred. But, on the other hand, it is most true, that there are too many Botanical writers who, without due consideration, or a sufficient power of forming good general views, or from an incomplete and superficial acquaintance with their subject, are, like this Mr. Spach, in the habit of introducing innovations which science indeed repudiates, but which produce the greater public inconvenience, because it has usually happened that the writings of such persons are intended for popular purposes, and are directed to subjects of common occurrence. In the case I have now brought forward, the genus Œnothera, one of the most natural and indivisible in the whole science, is cut up into 12 pieces, to which, what with synonyms and blunders, at least 16 generic names belong, and the adoption of these renders necessary something more than 100 new specific names, which for one genus is pretty well. Surely, I shall not be thought too harsh and severe, when I pronounce the writings in which such enormities are perpetrated to be scientific nuisances.

To these general observations upon Mr. Spach's performance, I

have one or two more to offer of a more special nature. There really is one grain of corn in the midst of his chaff. He states that certain supposed Enotheras have their chalaza bordered by a fringed margin. This is obviously an additional organ and a special type of structure: it is the beginning of the feathery appendage of the seed of Epilobium, but it is incapable of performing the office of buoying up the seed in the air so as to enable it to be dispersed from place to place. I find the structure to be as Mr. Spach states, and that the species collected by the character are Œ. Romanzovii, purpurea, and the like, which will not intermix with the true Evening Primroses, and which have quite a peculiar habit. Among other things, their flowers have no tendency to become yellow. To these plants the name of Godetia may be assigned. But Mr. Spach refers to the same type of structure, Enothera densifora, and the species now before me, making them however into another genus, which he calls Boisduvalia. As I have the seeds of both at this moment under my microscope, I can safely affirm that neither of these species has any trace of a fringed border to the chalaza, and that consequently the most remarkable part of their supposed character has no real existence. Mr. Spach adds to these marks of distinction, that of the stamens which are opposite the petals being very short (brevissima); this is hardly true of Œ. densiflora, and it is altogether untrue of Œ. humifusa. Boisduvalia may, therefore, be consigned to the same fate as the rest of Mr. Spach's new genera.







#### ONCIDIUM Russelliánum.

The Duke of Bedford's Oucidium.

Nat. ord. Orchidaceæ, § Vandeæ.
ONCIDIUM.—Suprà, vol. 13. fol. 1050.

#### B. Labellum integerrimum.

O. Russellianum; pseudobulbis ovatis costatis diphyllis, foliis ligulato-lanceolatis patentibus, racemo paucifloro radicali, sepalis petalisque conformibus ovato-oblongis subundulatis, labello postico oblongo-cuneato retuso apiculato subsinuato, lamellis disci truncatis.

Folia lætè viridia. Caulis fusco-purpureus. Sepala et petala fusco-purpurea viridi marginata et costata. Labellum lilacinum lamellis disci purpureis albo-marginatis, quarum series tres geminatæ truncatæ sensim antepositæ pares duas includunt angustissimas pariter truncatas. Columnæ alæ semiovatæ erosæ acutæ luteæ; gynizus margine purpureo basi utrinque bidentato (fig. 1.); anthera et pollinia Oncidii.

That this is a genuine species of Oncidium I by no means aver; on the contrary it differs from the general form of that genus in its undivided posterior lip, and in the two teeth which are placed below the gynizus on either side: its colour too, notwithstanding the example of O. Lanceanum, is different from what prevails in the principal part of the species of this very natural and extensive genus. Nevertheless I do not feel justified in forming a new genus out of the materials I at present possess. The plant may possibly be a transition species; and it ranges well enough with the verbal character of Oncidium.

I have named this species in compliment to his Grace the Duke of Bedford, one of the many liberal patrons of Botanical science of whom England now can boast, and in whose stove at Woburn it first appeared in Europe. It was obtained from the garden of Mrs. Moke at Tejuca near Rio Janeiro, by the Hon. Capt. J. Roos, R.N. who sent it to Woburn along with many other valuable plants in 1835.







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#### 1831

#### \* BARTONIA aurea.

#### Golden-flowered Bartonia.

Nat. ord. Lossaceæ

BARTONIA, Pursh. Sepala 5. Petala 5-10, nunc 5 staminibus totidem alternantibus petaloideis. Stamina 00. Capsula subclavata, sessilis, apice 3-(-7 DC.) valvis. Placentæ serie simplici polyspermæ.—Herbæ, caulibus teretibus, ramosis, pallidis, hispidis, fragilibus, erectis, nunquam scandentibus.

B. aurea; foliis ovato-lanceolatis simpliciter pinnatifidis laeiniis inferiorum grosse serratis, bracteis ovatis pinnatifidis flores obvallantibus, petalis 5 obovatis cuspidatis, filamentis numerosissimis omnibus filiformibus.

Herba annua, 2-3-pedalis, erecta, ramosa, undique pilis pungentibus hand prurientibus hispida; caulibus pallidè cinereo-virentibus fragilibus. Folia atroviridia; inferiora 3 p. longa, sessilia, subamplexicauliu ex ovată basi lanceolata, acuminata, pinnatifida, lobis utrinque circiter 5 grossè serratis; superiora sensim breviora, demum in bracteas abeuntia pinnatifidas quoque, culyce paulò breviores eumque arctè obvallantes. Flores axillares, rersus fastigia ramulorum. Calyx pilis incanis hispidus; tubo ovario adnato, oborato; limbo 5-partito, patente, æquali, corollà breviore. Petala 5, aurea, lucida, sub sole tantum expansa, ferè unciam longa, subrotundo-obovata, cuspidata, æstivatione convoluta. Stamina numerosissima, calyci insertu, filamentis omnibus filiformibus exterioribus longioribus. Ovarium 1-loculare placentis 3 parietalibus, linearibus, polyspermis; semimaturum parietibus lævigatis nitidissimis. Semina indefinita, pallidè fusca, testà subcoriaceà sub microscopio minutissime tuberculata. Embryo in medio albuminis parci oleoso-carnosi; cotyledonibus planis virescentibus, radiculà tereti albâ.

A very beautiful half-hardy annual, discovered by Mr. Douglas in California, and raised in the garden of the Horticultural Society, where it flowered in July last.

It is only beneath bright sunshine that its splendid flowers unfold; in the early morning the plant is a shabby bush, with pale greenish-grey branches and weedy leaves; but as the sun exercises his influence the petals gradually unrol as

<sup>\*</sup> Named in compliment to the late Dr. B. S. Barton of Philadelphia,

if in acknowledgment of his power, till every branch is radiant with gold; and so metallic is the lustre of the inside of the petals, that one would really think they must be composed of something more solid and enduring than the delicate and perishable tissue of a flower.

It is probable that this is a species that will be apt to degenerate, and which, if neglected, or not supplied with sufficiently rich and moist soil, will have its beauty greatly impaired. The wild Californian specimens are by no means so handsome as those of the Garden.

What I should recommend for it is, firstly, a sheltered situation, for the branches are very brittle and liable to be broken by wind; secondly, a warm and sunshiny spot, for without sun Bartonia will not be brilliant; thirdly, a very rich soil, for she is a gourmande in her way, and if starved she will not gain half her natural size; and, fourthly, a good deal of moisture, for she is a thirsty sort of personage, and would prefer the banks of a rivulet to the side of a hill.





#### SARCOCHILUS falcatus.

Falcate-leaved Surcochilus.

Nat. ord. Orchidaceæ § Vandeæ.

SARCOCHILUS, R. Br. Perianthium patens. Sepala lateralia cum ungue labelli subtùs connata. Petala conformia. Labellum ecalcaratum, cum ungue columnæ continuum, calceiforme; lobo intermedio carnoso solido, lateralibus ascendentibus petaloideis. Columna brevissima, marginibus tenuibus inflexis. Anthera bilocularis, valvis antheræ inferioribus deflexis erosis. Pollinia caudicula lineari affixa glandula deltoidea.—Epiphyta acaulis, vel brevissimè caulescens. Folia disticha, lineari-lanceolata, subcoriacea. Racemi axillares, crecti, 3-6-flori, secundi. Bracteæ breves, latæ, ovatæ. Florcs mediocres.

S. falcatus. R. Br. Prodr. 332. Lindl. g. & sp. orch. 142.

This rare plant has been sent me both by Mr. Bateman and Messrs. Loddiges. The drawing was made in the collection of the latter gentlemen in April last.

It is a native of New Holland and near Hunter's River; but so rare that I have never yet received a single native specimen except an imperfect one for which I was some years since indebted to Dr. Brown, who however saw it only in an imperfect state.

The flowering specimens, with which my garden friends have supplied me, while they have enabled me to complete my account of it, have also shown that this hitherto little known species is really an extremely pretty little plant, which, without any of the gaudy colours of many of its tribe, is so neat and simple in its appearance as to be sure to captivate the feelings of every lover of nature.

It must be treated just like other Orchideous Epiphytes.

4 1





## \* BRUNÓNIA australis.

#### Southern Brunonia.

Nat. ord Brunoniaceæ.

BRUNONIA, Smith. Capitulum involucratum. Calyx 5-fidus, 4-bracteatus. Corolla monopetala, infundibuliformis: limbo 5-partito, laciniis 2 superioribus altius divisis. Stamina 5, hypogyna. Antheræ connatæ. Ovarium monospermum. Stigmatis indusium bivalve. Utriculus inclusus tubo aucto indurato calycis superne patuli laciniis plumosis. Semen exalbiminosum. Br. Prodr. 589.

B. australis; foliis undique scapisque infernè villosis: pilis patulis, calycis laciniis longitudinaliter plumosis: apice acutiusculo. R. Br. l. c. 590.

A most interesting new perennial, introduced by Mr. James Backhouse in 1834. The drawing was made from specimens supplied by Mr. Lowe of Clapton, and I have also received it from the Messrs. Backhouses of York.

In appearance it is very like our wild Scabiouses, but it is delightfully fragrant. It no doubt requires the protection of a frame in winter, and would probably be more at home in such a place, or in a cool greenhouse even during the summer; and the general neatness of its appearance renders it peculiarly well adapted for such a mode of cultivation. I presume it will be easily increased by partition of the crown of the root.

Neither the cultivated plant nor my fine wild specimens from Mr. Gunn agree exactly with Dr. Brown's defini-

<sup>\*</sup> So named by Smith in compliment to Robert Brown, Esq. D. C. L. &c. &c. the present Keeper of the Banksian herbarium in the British Museum, whom I may designate with perfect truth as the most learned systematic Botanist of this or any previous age.

tion of the species, for he states that the scapes are only villous at their base, with spreading hairs. I find them, on the contrary, equally downy at the top, but it is true that the hairs of that part are not spreading.

This genus is the representative of the very small Natural Order Brunoniaceæ, allied to the Scabious tribe, to Globulariaceæ, to the Campanula tribe, and to other Monopetalous orders. An account of it is given in the Introduction to the Natural System of Botany, whither the reader is referred for information concerning its place in the system, and the nature of its affinities.





# \* CELÓSIA coccinea.

#### Scarlet Cockscomb.

Nat. ord. Amaranthaceæ.

CELOSIA, L. Bracteæ numero incertæ, scariosæ, acuminatæ, flore suppositæ. Calyx 5-phyllus, scariosus. Stamina breviter monadelpha filamentis basi latissimis. Stigma leviter trifidum. Utriculus circumscissus, polyspermus.

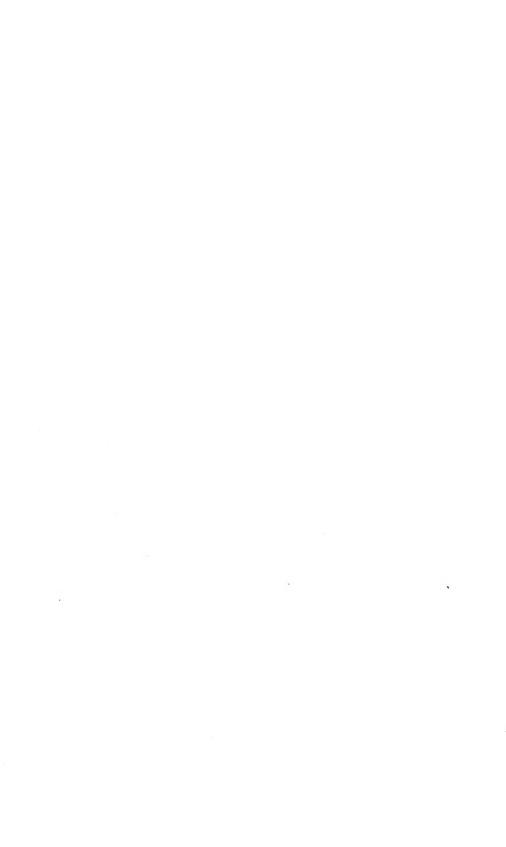
C. coccinea; foliis angustè lanceolatis acuminatis, caule sulcato, spicis multiplicibus compressis acuminatis pyramidalibus, staminibus calyce brevioribus.
C. coccinea. Mill. dict. no. 4. Willd. sp. pl. 1. 1199. Röm. & Schult. 5. 465.

One of the many forms in which the Cockscomb makes its appearance in Asia; but whether or not it is truly a distinct species I cannot judge. It differs from C. cristata chiefly in the crowded pyramidal arrangement of the inflorescence, the narrower leaves, and the short stamens. It is also a far more hardy plant, for while the common Cockscomb can only be brought to produce its stiff and fantastical crests with much care and assiduity, this demands no other attention than is required by every tender annual, and goes on enlarging its glowing crimson tassels, in the open border, till winter destroys it.

The drawing was made from specimens communicated by the Hon. W. F. Strangways from his garden in Dorsetshire, in the end of last October.

<sup>\*</sup> Said to be derived from  $\kappa\eta\lambda\epsilon\sigma_{\mathcal{C}}$ , something burnt; because the flowers look as if scorched and dried up by exposure to heat.





flower from which the sketch was made flowered in the collection of Earl Fitzwilliam at Wentworth House, under the care of Mr. Cooper, who received it from the Botanic Garden at Glasgow. Mr. Cooper is one of the most zealous and successful cultivators of rare plants in this kingdom, and has with unremitting exertion brought together the fine collection of plants now at Wentworth, by a liberal system of exchanging his superfluities for those of other persons. He has now for above twenty years had the management of the Botanic Garden at Wentworth, and few cultivators deserve better the compliment of having his name handed down to posterity, as engrafted in our botanical nomenclature. It seems that bulbs of this singular plant flowered about the same time at the Botanic Garden at Edinburgh, and at Mr. Dickson's nursery, but Mr. Cooper was at least one of the first who brought it into flower, and, as the name Drummondia is preoccupied, the genus is named after Mr. Cooper. It is possible that the plant may be found to endure our climate, as the frosts are severe in Texas, but as it pushes its leaves in the autumn, it probably grows in a temperate situation and would be injured by our winters, and at present it must be considered as a greenhouse or frame plant. It is nearly allied to Zephyranthes. cessive one-flowered scapes were produced, the first of which ripened seed that readily vegetated. The limb expanded quite flat. The pollen viewed in the microscope is difformed like that of Zephyranthes candida, and not of the usual more regular and oval form that prevails amongst the genera allied to it. It is doubtful whether Z. candida, ought not to be generically distinguished by that and some other features from Zephyranthes."

The back of a petal.
 Ditto of a sepal.
 Stigma.
 Ripe seed.
 Inside of the mouth of the tube, shewing the sessile anthers.

Mr. Herbert speaks of another species, nearly akin to this, which has flowered in the greenhouse at Spofforth, equally from Texas. This plant has at this time (beginning of January, 1836) three leaves nearly a foot and a half long, and may be distinguished by the following name and character.

<sup>&</sup>quot;Cooperia chlorosolen; foliis sesquipedalibus,  $\frac{1}{8}$  unc. latis tortilibus acutis viridibus; germine sessili; spathâ  $1\frac{1}{2}$ -unciali tubulosâ apice fenestratâ; perianthii tubo  $4\frac{1}{4}$ -unciali viridi, limbo  $1\frac{1}{8}$ -unc. albo sepalis viridi-apiculatis extus viridi-lineatis; stylo semunciam vel ultra tubo breviore."—W. H.





## \*KAGENECKIA cratægifólia.

## Cratægus-leaved Kageneckia.

Nat. ord. Rosaceæ, § Quillajiæ.

KAGENECKIA. Flores unisexuales. Calyx 5-fidus, laciniis æstivatione imbricatis. Petala 5. Stamina marum 15, æstivatione deflexa, quorum series exterior prima erigitur. Discus ceraceus tubum calycis muniens. Carpella 5, petalis alterna, tomeutosa, omninò sejuncta, ovulis plurimis horizontalibus; styli subnulli; stigmata simplicia emarginata. Folliculi lignosi, dehiscentes; seminibus samaroideis.

K. cratagoides; floribus corymbosis, foliis oblongis serratis acutis, sepalis margine tomentosis subdenticulatis.

K. cratægoides. Don in Edinb. Ph. Journ. n. s. 10. 229.

"Lydæa Lyday. Molin. Hist nat. chil. ed. 2. 300."

A very pretty and half-hardy evergreen shrub, native of Chili, and flowering in this country in June.

I call it half-hardy because I have never yet seen it cultivated in the open air, except beneath the protection of walls, but I have no doubt that it will succeed perfectly in our South-western counties.

The plant has never yet been increased except by seed, but it would doubtless multiply by layers, if not by cuttings. Our drawings were made in the garden of the Horticultural Society in June last.

Professor Don refers this genus, Quillaia and Vauquelinia, to an order he separates from Rosaceæ, under the name of Quillajiæ, for the following reasons, "Quillaia and Kageneckia, (he says,) together with Vauquelinia, I consider,

<sup>\*</sup> Dedicated by the authors of the Flora Peruviana to M. de Kageneck, Ambassador from the Emperor of Germany to the King of Spain.

as constituting a small family, differing essentially both from Rosaceæ and Spiræaceæ in their erect ovules, and from the latter also in the valvular æstivation of their calyx." But I think there must be some inadvertence or typographical error in this paragraph, or possibly both combined; for certainly Kageneckia has horizontal, not erect ovules, and an imbricated not valvular calyx. I see no more difference between them and Rosaceæ than between Spiræa and Potentilla. The unisexuality of the flowers is certainly no mark of distinction, for Fragaria is hardly otherwise; and the convolute cotyledons of Kageneckia have their parallel in Chamæmeles.







## STANHÓPEA insígnis.

Noble Stanhopea.

Nat. ord. Orchidaceæ, § Vandeæ. STANHOPEA.—Suprà, vol. 18. t. 1539.

S. insignis; labello medio quam maximè constricto, hypochilii subrotundi lateribuscornutis incurvis, epichilio ovato medio depresso cornubus duobus baseos incurvis. Gen. et Sp. Orch. 157.

Epidendrum grandiflorum. Humb. & Bonpl. Pl. æquinoct. p. 94, t. 27. Anguloa grandiflora. H. B. K. nov. gen. & sp. pl. 1. 343. Kunth Synops. 1. 332.

Stanhopea insignis. Hooker in Bot. Mag. 2948-9. Lodd. Bot. Cat. t. 1985.

Bracteæ membranaceæ, spathuceæ, subscariosæ, striatæ, ovarii longitudine, ut et ovarium ipsum leviter furfuraceæ. Ovarium obtuse triquetrum, obclavatum, angulis intermediis costatibus minoribus. Sepala 3 patentiu, circiter 4 uncias inter suos apices, ovata, carnosa, concava, obtusa, flava, lucida, intus sanguineo-guttata; 2 lateralibus basibus connatis. Petala lanceolata, undulata, reflexa, magis lutea, sanguineo interruptè fasciata. Labellum carnosum, cum basi columnæ non articulatum, a sepalis distinctum, basi ventricosum, albidum, atro-sanguineo confertè guttatum, limbo 3-lobo, lobo intermedio subcordato ovato carnoso sanguineo guttato, lateralibus falcatis incurvis acuminatis cornnformibus. Columna maxima, 2 uncias longu, cum ovario continua, basi semiteres sursum alata, apice obtusè triloba, sanguineo densissimè guttata. Stigma clausum, rostello subulato acuminatissimo incumbente. Anthera apice membranacea, bilocularis. Pollinia 2, obovata, basi acuminatissima, extrorsum fissa. Glandula subrotunda, anticè subulata, posticè magis membranacea, subbiloba; caudicula brevis membranacea.

The drawing of this plant was made from a specimen sent me in 1830 by the late Mr. Cattley; at that time it was a rarity, and the specimen was thought a fine one, but the cultivation of this genus has since become so much improved that still handsomer specimens are not uncommon. Some apology may perhaps be required for again figuring what has been well represented in the Botanical Magazine and the

Botanical Cabinet; but upon comparing the accompanying plate with those of Dr. Hooker and Mr. Loddiges, 1 find enough to induce me not to suppress the drawing that was made for this work.

Stanhopea insignis was originally found by Messrs. Humboldt and Bonpland on the trunks of old trees in shady woods near Cuença in Quito; it has since been procured abundantly from various districts of the north-eastern part of South America. There it fixes its pseudo-bulbs upon branches, elinging to them with its numerous creeping roots, and suspending in the air its stout zig-zag spikes of fleshy wax-like The species grows freely in a mixture of coarse peat, sand, and broken tiles or potsherds, provided it is kept constantly growing; but it does not like to be periodieally dried up as many others do. In order to see its curious blossoms in perfection the young spikes should be watched for, and as soon as they appear they should be artificially led over the edge of the pot or basket; otherwise their tendency to turn downwards is so greatthat they are apt to force themselves into the earth and so to become smothered.

In the annexed plate, the dissections are taken from a specimen, for which I am obliged to Lord Fitzwilliam, with much richer colours than usual; fig. 1. represents a lip seen from the upper side, and 2. the same part viewed from beneath; these figures show the cup-shaped base of this organ, the spotted tongue that terminates it, and the two long fleshy horns that project on each side of it.—Who shall imagine the use that such curious parts are intended for? 3. and 4. are the hardly less curious pollen-apparatus.





Fair try S. Fladgway 169 Piccadilly March . 1836.

## KENNÉDYA glabráta.

Smooth-leaved Kennedya.

Nat. ord. Leguminosæ. KENNEDYA.—Suprà, vol. 11. fol. 944.

K. glabrata; foliolis 3 cuneatis mucronatis glabris petiolis caulibusque pilosis, stipulis late ovatis acutis, bracteis deciduis, pedunculis foliorum longitudine subsexfloris.

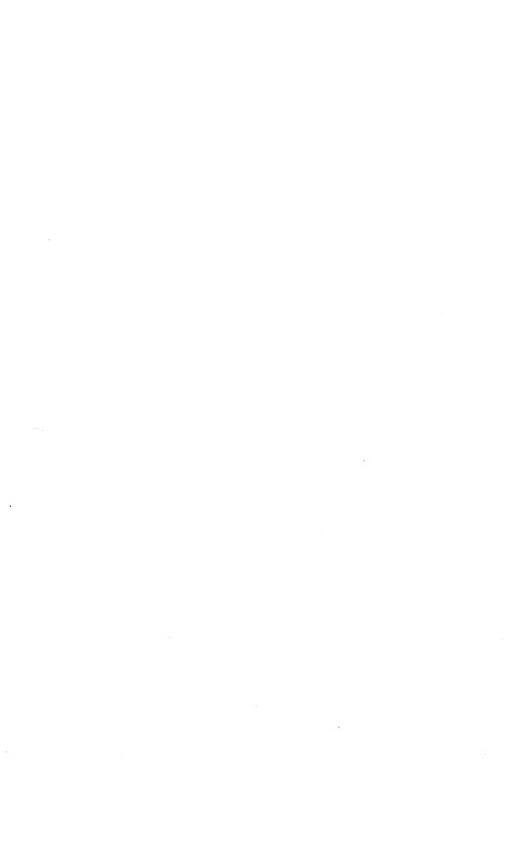
A specimen of this very pretty greenhouse climber was communicated to me by Mr. Knight of the King's Road, in May, 1835. It is a New Holland plant, probably from the South coast, and very distinct from all that have hitherto been figured.

The slender wiry hairy stems, broad ovate sharp-pointed stipules, and smooth leaves, with wedge-shaped leaflets, which are shining and almost entirely destitute of hairiness, sufficiently mark the species.

A hardy greenhouse shrub, propagated by cuttings.

None of the Kennedyas which I have yet seen have so clear and bright a scarlet as this; and the effect of the colour, brilliant as it is, is much set off by the green spot bordered with deep brown, at the base of the standard.

\*





### \* TRISTANIA macrophylla.

### Large-leaved Tristania.

Nat. ord. MYRTACE.E.

TRISTANIA, R. Br. Calyx 5-fidus, persistens, tubo turbinato. Petala 5. Staminum phalanges 5 petalis oppositæ iisdem vix longiores. Antheræ incumbentes. Capsula 3-locularis, polysperma, semierecta v. inclusa. Semina aptera.——Frutices australasici. Folia lanceolata. Flores pedunculati subcorymbosi. D. C. Prodr. 3. 210.

T. macrophylla; arborea, foliis oblongo-lanceolatis acutis subverticillatis, ramulis calycibusq. pubescentibus, phalangibus polyandris, capsulâ omnino infrâ.

T. macrophylla. All. Cunn. MSS.

Arbor procerus, ranulis levissime pubescentibus citò calvis. Folia 5-6-p. longa, coriacea, ovato-lanceolata, acuta, petiolata, punctis pellucidis confertissimis. Flores ex axillis foliorum decessorum, ternati, breviter pedicellati in apice pedunculi pubescentis ancipitis; nunc abortu lateralium solitarii. Calyx pubescens; laciniis 5, brevibus, ovatis, acutis. Petala 5, unquiculata, concava, patentiá. Phalanges staminum polyandræ, lineares, petalorum longitudine. Capsula omnino infera, semitrilocularis, virtice truncato dehiscens polyspermo.

Drawn in August, 1835, from specimens communicated by Richard Harrison, Esq. of Liverpool, who received it some years since under the name of *Tr. laurina*. The plant had been constantly kept in the Greenhouse, where it had gained the height of four feet, losing the exterior of its bark like Arbutus Andrachne.

<sup>\*</sup> From  $\tau_{\rho\epsilon\iota\varsigma}$  three, and  $i\sigma\tau a\mu a\iota$  or  $\epsilon\sigma\tau a\nu a\iota$  to stand; in allusion, as we presume, to the ternate disposition of the flowers and their stalks; the three-forked inflorescence of this doubtless very distinct genus being strikingly different from all to which it is nearly allied in the parts of fructification.—Smith.

Its flowers usually appear in threes; but in Mr. Harrison's specimens they were solitary; in other respects they quite agreed with a wild specimen collected by Mr. Allan Cunningham and given me by Dr. Hooker.

To Mr. Cunningham I am indebted for the following information respecting this species, and for specimens of it and the undermentioned, which were long since collected by him in his various expeditions of discovery in New Holland.

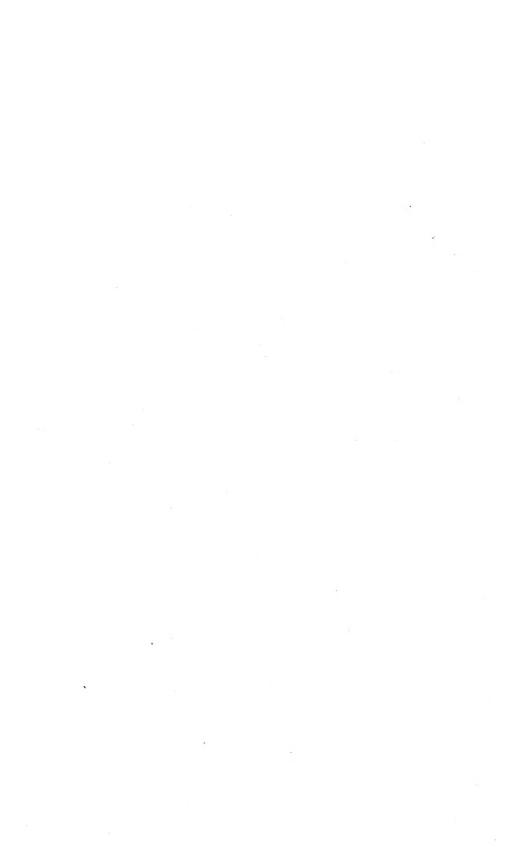
"T. macrophylla is a tree 50-60 feet high, affording, by means of its ample foliage, a pleasant, agreeable shade, on the sandy southern shores of Moreton Bay, New South Wales (Lat. 27°. 30′. s.) where it was first observed, bearing flowers and fruit, in Sept. 1824. It is nearly allied to T. conferta, R. Br. but the segments of the calyx are smaller."

T. suaveolens; arborea, foliis oblongo-lanceolatis alternis glabris, petiolis calycibusque pubescentibus, laciniis calycis ovatis brevibus acutis, phalangibus polyandris.

- "T. suaveolens Smith in Rees-Melaleuca suaveolens Gartn.
- "A tree of irregular growth 15-20 feet high, frequent in damp rocky places, margins of gullies, &c.; Endeavour River, 1770, Sir Jos. Banks; July 1829, N. E. Coast, New South Wales, A. C."
- T. umbrosa, A. C.; arborea, foliis oblongis mucronatis oppositis glaberrimis opacis, fructibus globosis superis glaberrimis.
- "Twenty-five to thirty feet high, in dark shady woods, on the shores of York Sound, N. W. Coast of Australia, 16th Sept. 1820; third Voyage of H. M. Cutter Mermaid, Capt. King. Rare."
- T. depressa, A. C. (D. C. prodr. 3. 210); glaberrima, caule fruticoso, foliis subverticillatis angusto-oblongis, fructibus solitariis omninò inferis.
- "A low shrubby plant, on barren, stony hills; islands of Repulse Bay of Cook, New South Wales, tropic (Lat. 20° 35′. s.) June 8, 1829."

- T. albens (D. C. prodr. 3, 210); arborea, foliis oblongis subundulatis ciliatis subtus pallidis oppositis, petiolis ramulisque tomentosis, fructibus capitatis coadunatis inferis pedunculisque tomentosis.
- "Turpentine tree of the Colonists. A tree 60-80 feet high; in shady situations, New South Wales."
- T. psidioides, A. C.; arborea, foliis obovato-oblongis obtusis mucronatis alternis subtus albo-tomentosis, ramulis pedunculis fructibusque superis albo-tomentosis.
- "A tree of slender habit, forming brushes in ravines falling into the Regent's River, Brunswick Bay, N. W. Coast, Australia (Lat. 15° ¼. s. Long. 124°. 45′. E.) 10th Oct. 1820; Mermaid's second Voyage."
- T. salicina, A. C.; arbuscula, foliis lineari-lanceolatis acuminatis subdentatis confertè verruculosis alternis ramulisque angulatis glabris, floribus laxè corymbosis, calycibus superis glabris.
- "A slender tree, 12-15 feet high, in shaded ravines, Springwood, Blue Mountains. Sept. 1822."

. .





Fresh March 1.1035.

## ŒNOTHÉRA serótina.

## Late-flowering Evening Primrose.

Nat. Ord. Onagraceæ. ŒNOTHERA.—Suprà, vol. 2. fol. 147.

Œ. serotina, caule ascendente, internodiis subæqualibus, foliis lineari-lanceolatis subdentatis pubescentibus, capsulis pedicellatis obovatis tetrapteris pubescentibus.

CE. serotina, Sweet Fl. G. 1, ser. 2, 184.

According to Sweet this plant was sent under the present name by Mr. Nuttall to the Liverpool Garden; I do not, however, find it noticed by the latter Botanist, nor is it mentioned, as far as I can discover, by any writer on the plants of North America. It is probably considered, and perhaps with reason, a mere variety of Æ. fruticosa, from which it differs more in habit than in any very precise characters. Its leaves are narrower and longer, its stem much less erect, and the leaves and inflorescence are not separated from each other by a considerable interval, as is usually the case in Œ. fruticosa. The period of flowering of Œ. serotina is later, extending into November.

In size the flowers are variable. Usually they are as is here represented, seldom so large as in the figure in Sweet's Flower Garden.

It is a hardy perennial, growing best in a moist, but well drained American border; but not refusing cultivation even in common garden soil. The late period to which its flowering is protracted renders it an acceptable species.

#### NOTE UPON FOL. 1829.

Mr. Lambert has satisfied me that the seeds from which his plants of Œ. concinna were raised, were really obtained from Chilian specimens, collected by Mr. Cuming. The species must, however, be

of very rare occurrence, for no notice is taken of it in Messrs. Hooker and Arnott's valuable catalogue of Chilian plants, nor do I see for what species those authors, who I presume must have had all Mr. Cuming's collection, could have mistaken it. The only new species they mention is Œ. mendocinensis, which was not found by Mr. Cuming, and which seems from the description to be a very different plant. It is no doubt improbable that the same species should be found in Chile and in Florida, but I am still at a loss to discover the difference between Œ. concinna and Œ. humifusa.

With regard to the observations I felt called upon to make upon the absurdity and mischievousness of the endless changes of names introduced into Botany by some Botanical writers, I cannot but feel upon consideration that it was wrong in me to assign particular motives to Mr. Spach for his proceedings, however much I might be disposed to ridicule or condemn them. As it is not my nature to be either uncharitable or unjust, I do not scruple to take this opportunity of recalling that part of the remarks, in which I assigned Mr. Spach a place in the school of Schreber; but in stating this I by no means wish to be understood as withdrawing one word of the remainder of the criticism. On the contrary I regard such a case as that which elicited my animadversions to be one of those which there is no hope of curing without the application of the actual cautery.



## CORYÁNTHES macrántha.

Large-flowered Coryanthes.

Nat. ord. Orchidaceæ, § Vandeæ. CORYANTHES.—Suprà, vol. 21. t. 1793.

C. macrantha; foliis angusto-lanceolatis, pseudo-bulbis ovato-conicis altè sulcatis, labello utrinque quater plicato: plicis deflexis.
Gongora macrantha. Hooker Bot. Misc. 2. p. 151. t. 80.
Coryanthes macrantha. Hooker in Bot. Mag. fol. 3102 in textu. Gen. & Sp. of Orchideous Pl. 159.

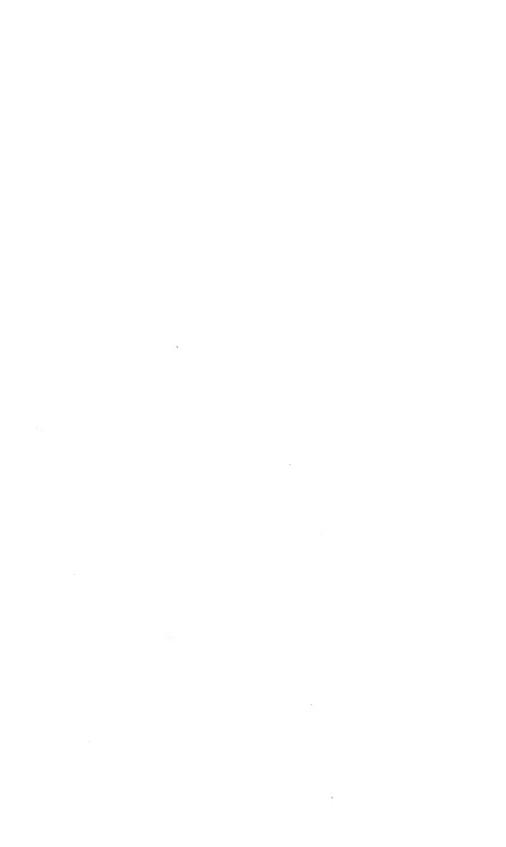
Accustomed as we are now become to strange forms among Orchideous plants, I doubt whether any species has yet been seen more remarkable for its unusual characters than that now represented.

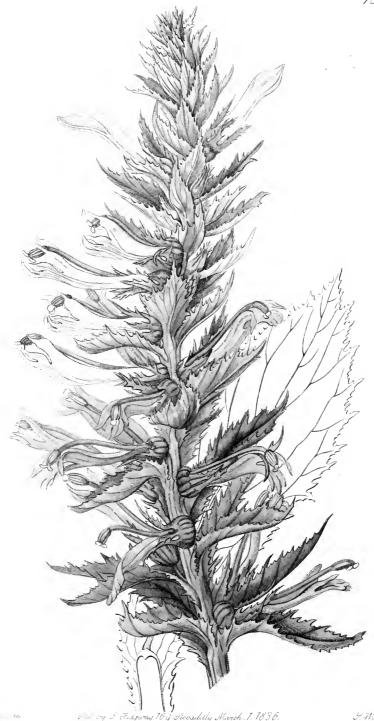
It was first figured by Dr. Hooker in the Botanical Miscellany, from a specimen in spirits sent him from the Caraccas by Mr. Lockhart. When the plant blossomed in Trinidad, the flowers appeared so extraordinary to those who saw them that the visitors to the Botanic Garden supposed them to be artificial. It has, however, lately flowered in the collection of Mr. Knight in the King's Road; and it proves to be in all respects the same as the specimen sent to Dr. Hooker.

The plant has the habit of a Stanhopea, or a Gongora; and pushes forth from the base of its pseudo-bulbs a pendulous scape, on which two or three flowers are developed. Each flower is placed at the end of a long stiff cylindrical furrowed ovary, and when expanded, measures something more than 6 inches from the tip of one sepal to that of the opposite one. In colour the sepals are an ochrey yellow, spotted irregularly with dull purple; they have a most delicate texture; the upper sepal falls back from the tip of the ovary, is narrow and not above one half the length of the two lateral ones, which, instead

of applying themselves to the lip as is usually the case, turn directly away from it, placing themselves at an acute angle with the upper sepal, and after a while collapsing at their sides till they look something like bats' wings half at rest. The petals, which are narrowly lanceolate, very weak and much curved at the edge, have the same colour and texture as the sepals nearly, and are intermediate in length between the upper one and those at the side; they hang nearly parallel with the column, but are so placed as to conceal in no degree the lip; nature taking most especial care to exhibit this strange part in the most conspicuous manner. The lip is as fleshy and solid in its texture as the sepals and petals are delicate; it is seated on a deep purple stalk, nearly an inch long, and forming an obtuse angle with the column, and consequently an acute one with the ovary; this stalk terminates in a hemispherical greenish-purple cup, or rather cap considering its position, and the latter, contracting at its front edge, extends forward into a sort of second stalk of a very vivid blood colour, the sides of which are thinner than the centre, turned back, and marked with 4 or 5 very deep solid sharpedged plaits. These plaited edges again expand and form a second cup, less lobed than the first, thinning away very much to the edges, of a broadly conical figure, with a diameter of at least two inches at the orifice; this second cup is of an ochrey yellow, streaked and spotted with pale crimson, and seems intended to catch a watery secretion which drips into it from two succulent horns which take their origin in the base of the column, and hang over the centre of the cup.

Of course this species will require the heat of a damp stove.





J. Walt. . M.

## LOBÉLIA decurrens.

### Winged-stemmed Lobelia.

Nat. ord. Lobeliace z. Lobelia.—Suprà, vol. 1. fol. 60.

L. decurrens; foliis ovato-lanceolatis decurrentibus confertis duplicato-serratis glabris, floribus axillaribus breviter pedunculatis, calveis villosi laciniis lanceolatis inciso-serratis, corollæ laciniis apice pilosis. Spreng. syst. 1. 712. Sweet. Brit. Fl. G. n. s. 1. 86.

L. decurrens. Cav. ic. 6. 13. t. 521. Röm. & Schult. syst. 5. 42.

Perennis. Caulis erectus, parum ramosus, densissimè foliosus, 2-pedalis, glaber, basibus foliorum decurrentibus alatus. Folia glabra, radicalia obovato-lanceolata, duplicato et inæqualiter dentata; caulina sessilia, lanceolata, internodiis 3-plo longiora, duplicato-dentata, dentibus omnibus acuminatis. Flores ad fastigium caulis, axillares, breviter pedunculati; calycibus pedunculisque villosis. Calyx superus, hemisphæricus, laciniis foliaceis lineari-lanceolatis pinnatifido-fimbriatis. Corolla pallide cærulea, rectiuscula, limbo erecto, 5-lobo extus pubescente, lobis anterioribus subconnatis, dorso fissa. Tubus staminum filiformis, glaber, antheris omnino connatis glaberrimis. Stigma bilobum extus annulo obscuro pilorum circumdatum.

Introduced some years since from Chile, but not frequently seen in collections. It is probably destroyed very often by our winters, which the plant, although perfectly hardy during the summer, is unable of bearing without protection.

It is a handsome perennial, growing vigorously in a moist partially shaded peat border, and increased without much difficulty by cuttings. It flowers in June, July, and August. Our drawing was made in the Garden of the Horticultural Society.

Like the rest of its genus, this has an exceedingly acrid milky juice, which renders it dangerous to those who handle it incautiously.





#### ALSTRŒMÉRIA aurantíaca.

### Orange-flowered Alstræmeria.

Nat. ord. Amaryllidaceæ, § 1. Caulescentes. Subordo 1. Operculosæ, Hypoxideæ, (operculo ovarii prominente) Herbert, MS.

ALSTRŒMERIA. Germen ovulis suberectis non imbricantibus, 6-costatum, superne 12-angulare apiculo trilobo (lobis costas sepalinas respicientibus). Perianthium sexpartitum laciniis quater disparibus apice reflexis petalis duobus erectis imo porrecto: filamenta recurvata, germini inserta, laciniarum bası vix adınata, petalina basi acutè ovali sepalina semicirculari capsulam signantia. Capsula acuminatè operculata sexcostata valvulis crustaceis septigeris dissilientibus, axe ab imâ parte trifariam disrupto, costarum dimidio inseparabiliter pedunculo adhærente; semina subrotunda testâ tuberculatâ difficulter separabili, hilo lævi, chalazâ circulari, endopleurâ ab albumine corneo inseparabili.—Plantæ Occidentales canle (quoad novi) erecto folioso vel squammato, pedunculis bracteatis, 1-5-(pluri?) floris. Herbert, MSS.

A. aurantiaca; erecta, foliis lanceolatis obtusis glabris obsolete denticulatis, perianthii foliolis integerrimis: interioribus lanceolatis acuminatis erectis. Don in Sweet Fl. Gard. 2 ser. 3. 205. t. 208.

? A. aurea. Graham in Jamieson's Journal, July. 1833.

The drawing of this plant was made in the Nursery of Messrs. Low and Co. of Clapton, in June 1833. It is a very handsome species, and with a little protection from wet during winter will live very well in the open ground.

For the following observations upon it I am indebted to the Honourable and Rev. W. Herbert.

"Alstræmeria aurantiaca has the flower stem with smooth leaves, persistent, and green for months after the seed is ripe and shed, and even the long leaf-like bractes on the peduncles remain till winter. A. pulchella, Bot. Mag. (erroneously so named, and apparently hæmantha of Flor. Peruv.) has the leaves ciliated, the stems shorter, the bractes less, and the whole perishable almost before the seed is ripe; the tubers lying dormant more than half the year, and sprouting slowly

in the spring. Aurantiaca never dies away entirely, unless perhaps if cut by severe frosts, but sends up fresh stems. The capsule of aurantiaca is much less acutely pointed and prolonged; its peduncles fewer flowered, less erect, and not so long. The peduncles of aurantiaca in the border at Spofforth are 4-inched and 3-flowered on a stem a yard high; those of the plant called pulchella, 9-inched and 5-flowered on a stem 12 or 13 inches high. The seed of aurantiaca is very pale chesnut-coloured, the chalaza rather elevated and a little tuberculated; those of the other plant of a much deeper chesnut, the tubercles which cover them fewer and harsher, the chalaza flatter and smoother, the hilum shorter, more distinctly marked and whiter.

- "Bomarea, amongst other differences from Alstræmeria, has the ovules cumulate and a little imbricating, the capsule coriaceous, not opening from the base and dissilient, but widely dehiscent at the top, persistent and thrown back; the seeds not ejected by disruption of the capsule, but adhesive, covered with a soft pulpy coat. In all the known species the stem is twining, and so far as I can ascertain, the style tripartible.
- "Sphærine (mihi) has the capsule indehiscent, the seed-coat pulpy, but less so than Bomarea, the stem tapering, flexuous, but not twining.
- "Collania (mihi) has the stem rigid, the umbel nodding, the leaves rigid, the flowers few, with a close tubular appearance, gibbous at the base, the germen smaller than the base of the flower, ribbed, turbinate, the fruit not known.
- "That the lobes on the point of the capsule in Alstræmeria, which are the bases of the three consolidated styles, and correspond with the three angles or lobes of the stigma, are opposite the ribs of the sepals, belongs in truth to the observations on the character of the order and not of the genus. An amended generic character of the order will be attempted in the revision of Amaryllidaceæ, preparing for the press."









### \* ANGRÆCUM caudátum.

Long-tailed Angræcum.

Nat. ord. Orchidaceæ, § Vandeæ.

ANGRÆCUM.—Suprà, vol. 18. fol. 1522.

A. caudatum; foliis loratis canaliculatis emarginatis, spicâ radicali pendulâ flexuosâ 4-florâ, labello obovato rostrato serrulato, calcare longissimo apice bilobo.

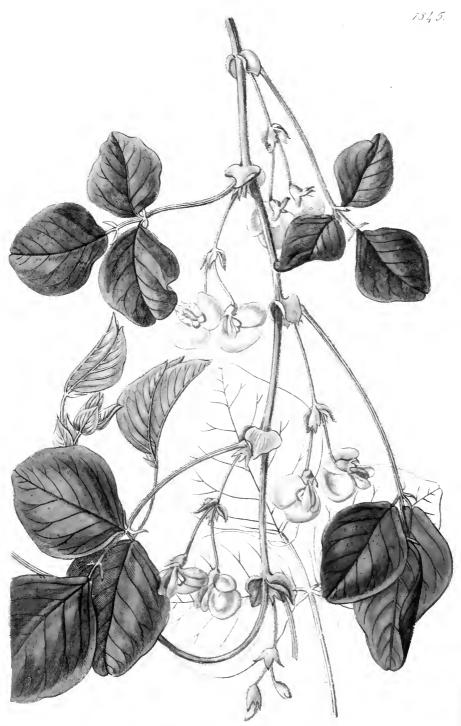
Epiphyta radices crassas simplices nebulosas promens. Caulis simplex, brevis, foliis loratis canaliculatis apice fissis 6 poll. longis, distichè imbricatis. Spica pedalis, ex axilla imorum foliorum pendula; pedunculo gracili, atroviridi, ad nodos tumido; rachi flexuosa, internodiis circiter 2 poll. longis. Ovarium sessile, fusco-maculatum, basi tortum. Sepala et petala explanata, lineari-lanceolata, acuminata, herbacea, æqualia, basi fulva, ferè 2 poll. longa. Labellum ejusdem longitudinis, album, petaloideum, serrulatum, cuneatum angulis rotundatis v. potius obovatum, apice mucrone longo viridi rostratum, imâ basi involutum et denticulatum, in calcar productum 9 poll. longum, fulvum, subulatum apice (fig. 3.) obtusum et bilobum. Columna fulvo-viridis, brevis, erecta, basi (fig. 1.) crassior et angulata, sursum attenuata et marginata, gynizo plano fulvo, rostello subulato gynizo longiore. Pollinia 2, posticè paulò sulcata, in caudiculam longam cuneatam sessilia.

A most remarkable new species of Angræcum, imported from Sierra Leone by the Messrs. Loddiges, in whose collection the accompanying drawing was made in August last. At present it is exceedingly rare, and is likely to remain so; for it seems to be one of the most difficult of the tribe to manage successfully. In the Nursery at Hackney it is attached to a piece, of wood suspended from the roof of the stove for epiphytes.

<sup>\*</sup> See folio 1522.

The most curious point of structure in this species is the unusual length of its spur, which measures nine inches from its base to its two-lobed apex. The only parallels to this among all the Orchideous plants I am acquainted with are those of Habenaria longicauda figured in the Botanical Magazine, t. 2957, and of Angræcum sesquipedale of Du Petit Thouars's Mascaren Orchideæ, t. 66 and 67. For what wise purpose these extraordinary appendages may have been destined by nature, we may well be unable to imagine. It would seem that they must be added to the vast list of objects which, to our confined apprehension, appear merely intended to exhibit the endless diversity of power of the Creator.





File by J. Sudgway toy Foresulty to 1.30.

# \* KENNÉDYA Stirlíngi.

Sir James Stirling's Kennedya.

Nat. ord. Leguminosæ, or Fabaceæ. KENNED YA.—Suprà, vol. 11. fol. 944.

K. Stirlingi; foliolis tribus subrotundo-ovatis mucronulatis glabriusculis, petiolis caulibusque pilosis, stipulis latè ovatis acutis, bracteis fasciculatis, v. verticillatis nunc trilobis nunc in involucrum conniventibus, floribus geminis, calycibus pedunculisque pilosis.

A graceful greenhouse trailing plant, native of the Swan River. It was raised by Robert Mangles, Esq. of Whitmore Lodge, from seeds given to him by Sir James Stirling, the Governor of the Colony, in compliment to whom it has been named.

Its thin broad pale green leaves, fringed with long weak hairs, and its twin scarlet flowers sufficiently characterise this species, which moreover is botanically remarkable for having its bracts collected into a whorl, or even grown together into a little involucre.

Flowers in April, and no doubt easily propagated by cuttings.

<sup>\*</sup> See folio 1421.







Tub by J. Swagway 16) Freewally Ap. 1. 1858

# \* CRATÆGUS microcárpa.

Small-fruited Thorn.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. microcarpa; subspinosa, foliis fasciculatis longè cuneatis 3-fidis lobatisque crenatis glabris nitidis, corymbis multifloris, calycibus glabris laciniis ovatis integerrimis, pomis ovato-subrotundis glabris 5-locularibus, putamine tenui.
C. spathulata. Elliott Fl. S. Carol. 1. 552. Loudon's Arbor. Brit. t. 31. k. non Mich. nec Pursh.

Few hardy plants are more deserving of general admiration for the neatness of their foliage, the diversity of their manner of growing, the beauty of their flowers in the spring, or the gay appearance of their numerous richly coloured haws in the autumn, than the various species of the genus And yet they are little known, except to the Cratægus. curious collector, they are not very frequently seen in gardens, if we except a few varieties of the common Hawthorn, and Botanists themselves have paid them but little attention. I, therefore, propose to avail myself of the circulation of this work for the purpose of bringing the subject into more notice, and of shewing how very well deserving the species of Cratægus are of general cultivation; but as they are very much alike in flower, and as their strongest claims to be considered ornamental plants arise from the beauty of their leaves and fruit, it is in the latter state that they will generally be represented.

<sup>\*</sup> See folio 1161.

C. microcarpa is, according to Elliott, a native of the upper districts of Georgia and Carolina; in Colombia county, Georgia, common, growing to a small tree, from twelve to fifteen feet high. It was also collected in an unusually spiny state by Mr. Drummond in the province of Texas.

Elliott confounds it with *Cr. spathulata*, which, as described by Michaux and Pursh, must be a different species in the way of *Cr. parvifolia*, and allied to the *C. virginiana* of the English nurseries.

In this country Cr. microcarpa is a small tree with slender, smooth, drooping branches, and something of the habit of the Whitethorn. Its leaves have a very handsome appearance, and are remarkably shining and deep green; they usually grow in clusters, have a long stalk, tapering upwards into a blade which is sometimes nearly entire, with only a tooth or two at the end, sometimes they are threelobed with crenated segments, and occasionally they are deeply three-parted; their form is always more or less spathulate. The stipules of the more vigorous branches are large and leafy. The flowers are white and appear in May, or the beginning of June, at the same time with those of Cr. cordata, and later than most others. The fruit is rather abundant, but small, and, although bright red, does not make much show upon the branches. The sides of the stones of the fruit are unusually thin for a Cratægus.

Our drawing was made in the Garden of the Horticultural Society.



# \* CRATÆGUS heterophýlla.

Various-leaved Hawthorn.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. heterophylla; foliis lucidis tardè deciduis lanceolatis cuneatis apice dentatis trifidis pinnatifidisque laciniis serratis, tubo calycis fusiformi, cymis multifloris, floribus monogynis, fructibus ovatis monopyrenis putamine ossco, stipulis maximis pinnatifidis.

C. heterophylla. Suprà, vol. 14. fol. 1161.

In the fourteenth volume of this work, at fol. 1161, this species is represented in its flowering state, and some account is given of its synonyms and general structure. In that account, however, it is necessary to observe that the fruit is erroneously described as black.

The accompanying plate will give an idea of its appearance when in fruit.

The tree, whence the drawing was taken, in the Garden of the Horticultural Society, is one of the handsomest in that very extensive collection of hardy trees and shrubs. It forms a dense pyramidal head, leafs among the first of the genus, and is soon covered with a mantle of snow-white blossoms. After the latter have fallen away the leaves become fully developed, and from their shining surface, neat figure, and firmness of texture, render the tree still a beautiful object. Finally, the rich crimson of the numerous haws which adorn the branches in the last days of autumn, harmonizes beautifully with the fading verdure of the leaves.

<sup>\*</sup> Sec fol. 1161.







Fibry J. Ridgway 16 & Facultury Ap. 1.1836.

#### 1848

### \* MAXILLÁRIA ruféscens.

Brownish Maxillaria.

Nat. ord. Orchidaceæ, § Vandeæ.

MAXILLARIA.—Suprà, vol. 11. fol. 897.

M. rujescens; pseudobulbis ovatis subtetragonis monophyllis, foliis lanceolatis utrinque acuminatis, scapis unifloris (prostratis) vagiuis distantibus, sepalis petalisque oblongis conformibus obtusis, labello oblongo trilobo etuberculato laciniis lateralibus minimis acutis intermediâ elongată emarginatâ. Suprà, fol. 1802. in textu.

A native of Trinidad, whence it was imported by Mr. Lowe of Clapton. It first flowered at His Grace the Duke of Devonshire's at Chatsworth, in December 1834, whence I was favoured with a sketch; since that time it has appeared in many other collections.

It requires the usual management of a hot damp stove, in which it grows freely.

By no means one of the prettiest of the genus, nevertheless its yellow labellum richly spotted with crimson, is a beautiful object when closely examined.

This species also occurs in gardens under the name of M. fucata.

<sup>\*</sup> See folio 1428.







### \* GODÉTIA lépida.

#### Smart Godetia.

Nat. ord Onagraceæ.

GODETIA Spach. Omnia Œnotheræ salvis seminibus angulatis queis comæ rudimentum adest marginis dentatæ formâ chalazam circumdantis.

Omnes annuæ, floribus rubicundis v. purpurascentibus, nunquam xanthinis.

G. lepida; erecta, foliis ovato-lanceolatis integerrimis, petalis subrhombeis obtusis denticulatis, staminibus petalis triplo brevioribus alternis brevioribus, capsulis sessilibus ovato-oblongis villosis.

Annua, pedalis et sesquipedalis, caule stricto ramoso pilis brevibus adpressis leviter pubescente. Folia ovato-lanceolata, integerrima, subpilosa, floribus æqualia v. paulò longiora. Sepala acuminata, reflexa, villosa, ovario parùm breviora, tubo brevissimo. Petala subrotunda in rhomboideam formam abeuntia, apice denticulata, pallide purpurascentia, maculá vinoso-purpured cuneatá in medio apicis. Stamina alterna breviora, antheris purpureis apice fulvis; petalis triplò breviora. Capsula sessilis, ovato-oblonga, pilis sessilibus albidis villosa. Semina fusca, depressa, angulata, cuneiformia, chalazá marginatá denticulatá.

A pretty new annual, found in California by Mr. Douglas. It was raised in the Garden of the Horticultural Society in July 1835. In some respects, especially in the spots on its petals, it resembles Godetia (Œnothera) quadrivulnera, but is more handsome than that species; in reality it is most nearly allied to Godetia (Œnothera) decumbens, already figured at t. 1221 of this work; but that species, indepen-

<sup>\*</sup> A name the meaning of which is unexplained by its author, M. Spach.

dently of its glaucous leaves, decumbent habit, and whole-coloured flowers, has less shaggy and more linear fruit.

My reasons for admitting the genus Godetia have been already given at fol. 1829, in the note.

The relationship of Godetia and Œnothera to Fuchsia is admitted on all hands; and everything that appertains to the latter beautiful genus is so generally interesting that I gladly avail myself of the present opportunity of publishing a memorandum, for which I am indebted to Mr. Allan Cunningham, concerning two apetalous species, one of which has already been figured in the Flora Peruviana, and the other lately discovered by Mr. Richard Cunningham in New Zealand.

#### \* Flores apetali.

F. procumbens; (Rich. Cunn. MSS.) caule procumbente adscendente, ramis gracilibus glabris, foliis sparsis alternis longè petiolatis lato-ellipticis subrotundisve obtusis basi subinde cordatis remotè denticulatis ciliatis, paginis glabris, pedicellis solitariis axillaribus flore ter brevioribus, perianthio infundibuliformi, lobis lanceolatis reflexis tubo brevioribus, stylo elongato filiformi stamina exserta superante, stigmate dilatato lobato pilis patentibus tenuiter instructo. A. C.

Totera ab incolis vulgò vocatur.

Hab. in Novæ Zelandiæ insula septentrionali: in arenosis propè littora, juxta pagum Matauri, adversum Insulas Cavallos, ubi in mense Martii floret.—
1834. Rich. Cunningham.

Fruticulus decumbens, virgatus. Rami patentes, graciles, teretes, juniores foliati. Folia subuncialia, venosa, basi cordiformia minutè denticulata utrinque glabra. Petioli unciales, complanato—filiformes, glabriusculi, suprà canaliculati. Flores axillares, solitarii, erecti, apetali. Perianthium tubulosum aurantio-luteum, limbus 4-partitus reflexus; laciniis æqualibus lanceolatis, acutis, viridibus, apicibus purpureo-luridis. Stam. 8; filamenta fauci inserta; antheræ ovatæ biloculares politates. Ovariums quadriloculares loculis pluri-

- ovulatis, ovulis obovatis erectis. Stylus complanatus staminibus longior. Stigma elavatum, lobatum. Baeca—A. C.
- F. apetala; (Ruiz. meliùs scandens) caule villoso scandente radicante, foliis confertis alternis petiolatis ovatis acuminatis integerrimis, petiolis ramulis foliisque junioribus copiosè villosis, floribus extremitatem versus ramulorum subcorymbosis pedicello plus quater longioribus, perianthio elongato tubuloso lobis ovatis acutiusculis erecto-patentibus tubo triplò brevioribus, stylo filiformi staminibus exsertis parum longiore, stigmate lobato glabro. A. C.
- Fuchsia apetala. De Cand. prodr. 3. p. 39. Ruiz et Pavon. fl. peruv. 3. p. 89. t. 322. f. b. (v. s. spont. in herb. Lambert.)
- Hab. in Peruvia: in nemoribus circà Huassi-huassi et Muña. Maio floret. 1779. Ruiz, Pavon, Dombey.
- Frutex scandens, super arborum truncos radicans. Caulis parum ramosus, teres, cortice multiplici ferrugineo, radicibus stoloniformibus longissimis arboribus adhærens. Folia venosa subtus purpurascentia, decidua. Petioli densè villosi. Flores corymboso-umbellati, dependentes, magni, apetali, sesqui v. 5-pollicares! Perianthii tubus ruber, limbus quadripartitus rectus, lobis parvis ovatis dilutè luteis. Stamina octo. Bacca oblonga tetragona, rubra quadripartita. A. C.





# \* OXYÚRA chrysanthemoides.

#### Ox-eye-like Oxyura.

Nat. ord. Composite.

OXYURA. De Cand. in Lindl. Nat. Syst. of Bot. ed. 2. page 259. Involucrum simplici serie verticillatum, foliolis herbaceis patentibus basibus suis cucullatis flosculos radii involventibus. Flosculi radii ferè neutri; pappo O, stylo bilobo, corollá ligulatâ trilobâ. Flosculi disci hermaphroditi, bracteis basi membranaceis apice herbaceis stipati; pappo O; corollá infundibulari, pubescente, basi paulò gibbosâ; antheris muticis; styli ramis subulatis acutis dorso villosis. Receptaculum planum.

Oxyura chrysanthemoides. D. C. in Herb. Hort. Soc. Lond.

Annua, erecta, ramosa, leviter pubescens. Caulis purpurascens. Folia inferiora pinnatifida, laciniis linearibus obtusis sublobatis; superiora sensim magis integra, suprema integerrima, omnia margine scabriuscula. Capitula solitaria, pedunculo subclavato tomentoso. Involucrum planiusculum, foliolis seriè simplici verticillatis, herbaceis, ligulatis, obtusis, basi ovaria flosculorum radialium involventibus; angulis dorsalibus hispido-echinatis. Ligulæ lato-oblongæ, involucro paulo longiores, trilobæ, basi luteæ, apice pallidæ. Flosculi disci infundibulares, ovario compresso glabro calvo (incuria pictoris pessimè repræsentatur hirsutum pappo irregulari setoso); tubus teres basi paululum gibbosus, pubescens, limbi erecti longitudine. Paleæ receptaculi membranaceæ, pilosæ, apice herbaceæ, barbatæ, corollarum ferè longitudine.

A new genus of Compositæ, placed by M. De Candolle, in his catalogue of the genera of that order in the second edition of my Natural System of Botany, in the *subdivision* Madieæ, of the *division* Galinsogeæ, of the *subtribe* Helenieæ, of the *tribe* Senecionideæ, of his first *series* Tubulifloræ, which nearly answers to the Corymbiferæ of Jussieu.

<sup>\*</sup> It is supposed that this word is formed from  $o\xi v_{\mathfrak{C}}$ , sharp, and  $ov\rho\alpha$ , a tail, but its application is not obvious.

With very much the aspect of Chrysanthemum coronarium, except that it is not half so tall, it agrees very nearly in structure with the widely different genus Madia, especially in having the ovaries of the florets of the ray enwrapped in the bases of the leaflets of the involucre.

This species is a hardy annual, introduced by the Horticultural Society from California, where it was found by Mr. Douglas. It flowers in the months of August and September, ripening seeds in abundance.

Of the dissections in the accompanying plate, fig. 4 represents an anther; fig. 2 a floret of the ray with its base enwrapped in the scale of the involucre; and fig. 3 the top of the style with the two subulate hairy branches of the stigma; but fig. 1 does not belong to the plant; it has been introduced by some negligence on the part of the artist.









## \* ONCÍDIUM altíssimum.

Tallest Oncidium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

ONCIDIUM.—Suprà, vol. 13. fol. 1050.

O. altissimum; pseudobulbis subrotundis compressis ancipitibus, foliis distichis ensiformibus carinatis acutis scapo decurvo multò brevioribus, racemo simplici, sepalis petalisque labelli longitudine lineari-lanceolatis undulatis, labello apice dilatato bilobo medio constricto basi auriculato, cristâ enneadactylâ, columnæ alis rotundatis crenulatis.

Epidendrum altissimum. Jacq. stirp. amer. 229. t. 141.

Planta elegans, parasitica arborum. Radices teretes, fibrosæ, cinereæ, numerosæ. Folia acuta, ensiformi-oblonga, avenia, nitida, integerrima, crassiuscula, pollicem lata, sesqni-pollicem longa, basi carinata, cæterum plana: orta singula e nodo rel tubere ovato, compresso, glabro, ovi interdum anserini magnitudine; qui ipse insidet basi folii alius radiculis, unius alteriusve, et similis. Inter hoc nodumque exsurgit scapus solitarius, teres, glaber, colore ferrugineo, tenuis, inclinatus, quudripedalis, superne racemosus; qui ad pedunculos et nodos vestitur spathis membranaceis, lanceolatis, cinereisque. Pedunculis fluori vel triflori plerumque, distichè alterni. Flores inodori, flavi cum maculis fuscis, numerosi. His sunt petala oblonga, distincta, utrinque acuta, undulata, subæqualia. Nectarii labii inferioris lacinia media est subquadrata, flavaque tota sine maculis. Reliqua in charactere obtinent, sicuti in Epidendro (Oncidio) carthaginensi. Jacq. l. c. 229.

I long ago suspected that two distinct species were confounded under the name of O. altissimum, and I even distinguished, by the name of O. Baueri, what appeared to be a different species from the Epidendrum altissimum of Jacquin, which is the original authority for the former name. I was afterwards led to suppose that O. Baueri was a mere form of O. altissimum, and I accordingly reduced it to a simple

<sup>\*</sup> See folio 1542.

variety, in the genera and species of Orchideous plants. In this however I am satisfied that I was wrong, as will I think be evident from the following comparison of the two species as they were seen last year in the stove of the Messrs. Loddiges.

- O. altissimum. Pseudobulbs nearly round, very much compressed, and two-edged. Leaves acute. Raceme decumbent nearly simple. Colours of the flower very bright. Wings of the column rounded and a little crenelled.
- O. Baueri. Pseudobulbs oblong, a little compressed, only slightly two-edged. Leaves broader, and rather acuminate. Raceme erect, very compound. Colour of the flowers rather dingy. Wings of the column very remarkably truncated.

It is impossible, now that these differences are made out, to combine the two plants as I once proposed. I therefore avail myself gladly of an opportunity afforded me by Messrs. Loddiges of figuring the true O. altissimum; and for the satisfaction of those who may not have access to the work in which it was first described, I have added the very words of Jacquin in speaking of that species.

The O. altissimum figured at fol. 1651 is the true O. Baueri.



non 16 de Charactery May 1.10 -

# \* CRATÆGUS orientális.

### Oriental Hawthorn.

#### ISOCANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomaceæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. orientalis; foliis subtrifidis inciso serratis basi cuneatis tomentosis, fructibus 4-5-pyrenis glabris sphæricis nudis, putamine crassissimo.
 Mespilus orientalis apii folio villoso, fructu magno pentagono purpureo glabro. Tourn. It. vol. 2. p. 172.

Folia tomentosa demum calva; stipulis magnis semicordatis serratis. Pedunculi tomentosi. Fructus atropurpurei, glabri, subpentagoni, pyrenis 4-5 osseis, putamine crassissimo.

A very handsome tree, with large snow-white fragrant vernal flowers, and rich purple autumnal leaves. When young it has a gray appearance because its leaves are downy; at a more advanced age it becomes green in consequence of the leaves losing their hairiness.

This I take it is the genuine Oriental Mespilus of Tournefort, with villous celery leaves, and a large purple 5-cornered smooth fruit, and is undoubtedly distinct from C. odoratissima to which some have referred it, as well as from C. tanacetifolia; each of these last mentioned species will be figured hereafter.

C. orientalis forms a small close-headed tree, with the

<sup>\*</sup> Sec folio 1161.

aspect of C. odoratissima. It is propagated by grafting or budding upon the common Hawthorn. The drawing was made in the Garden of the Horticultural Society last October.

It is a native of the Crimea and the parts bordering on the Black Sea.



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J 1dil. .

### \* ORNITHÓGALUM chloroleúcum.

## Green and White Ornithogalum.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Liliaceæ.

ORNITHOGALUM.—Suprà, vol. 8. tab. 158.

O. chloroleucum; foliis acuminatis canaliculatis strictis racemi corymbosi longitudine, filamentis ovato-lanceolatis acuminatis conformibus laciniis perianthii brevioribus, sepalis petalisque oblongis obtusis.

Folia sæpius racemi longitudine, aliquando breviora. Flores parvi, patentes. Ovarii loculamenta polysperma, ovulis imbricatis alatis ascendentibus. Stigma 3-fidum.

Found not uncommonly in the vicinity of Valparaiso, whence it has been brought by several collectors. It is the

<sup>\* &</sup>quot; An ancient name, adopted by the Latins from the Greeks, evidently derived from oρνις, ορνιθος, a bird, and γαλα, milk; but its application has proved a stumbling block to most etymologists. Ambrosinus presumes the word may allude, either to the shining milky-white of the flowers, like that of a hen's egg; or to the white egg-shaped bulbs. Tournefort supposes the flowers, being green when closed, and white when expanded, may have been compared to the wings of several birds. Linnæus first gave the true explanation, in suggesting (Mant. 364. Præclect. in Ord. Nat. 287.) that the O. umbellatum appears to be the "dove's dung," mentioned in the 2nd Book of Kings, chap. vi. 5. 25. as having fetched so high a price during the siege of Samaria. It is recorded by the sacred writer, that a quarter of a cab of dove's dung then sold for five pieces of silver; and the rabbinical commentators, taking the words literally, have asserted, absurdly enough, that it was used as fuel. As the plant grows copiously in Palestine, whence the English name, Star of Bethlehem, and the roots are still in common use for food in that country, the name is explained by the resemblance in the colours of the flower to the dung of birds, the white or milky parts of which, their urine, is contrasted with dull green, exactly as in the petals of this original species of the genus before us, and which appears to be the very one described by Dioscorides."—Smith.

number 692 of Cumings collection, 343 of Bridges, and 270 of Matthews.

It is a frame bulb, flowering in July. The specimen from which the drawing was taken was furnished by Robert Mangles, Esq.

There is no previously described species that can be confounded with it.





: 275 by 1500 1832

### 1854

## \* CAMELLIA japónica, Donckelaeri.

Donckelaer's Japan Camellia.

### MONADELPHIA MONOGYNIA.

Nat. ord. Ternströmiaceæ. CAMELLIA.—Suprà, vol. 1. fol. 22.

Camellia japonica, vide suprà, l. c.

### GARDEN VARIETY.

A remarkably beautiful variety, for the opportunity of figuring which we are obliged to Mr. Lowe of Clapton. It is said to be a genuine Japanese kind, and to have been brought to Holland by Dr. Siebold.

The blotching of the petals and the general appearance of the specimen have been very happily expressed by Miss Drake in the accompanying figure.

<sup>\*</sup> See folio 1267.



Do 'n & Sugaray 109 Swadilly Aloy 1. 1836.

& Whites. A.

## \* CRATÆGUS maroccána.

### Morocco Hawthorn.

#### ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomaceæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. maroccana. DC. prodr. 2. 628.

C. aronia. Decaisne in Ann. Sc. n. ser. 3. 264; not of others.

Folia glabra, longipetiolata, integra, triloba, 3-fida, 5-fida, imo 3-5-partita, lobis sæpius integerrimis acutis nunc subfalcatis. Poma pallide lateritia, subrotunda, dipyrena, putamine crassissimo.

Said, I know not on what authority, to be a native of Barbary; but it is not mentioned by Desfontaines, nor have I seen any certain specimen from that country.

It however undoubtedly occurs in Palestine, having been collected on Mounts Sinai and St. Catharine by M. Bové, in June 1832; its Arabian name is Sarrour. C. Aronia, to which M. Decaisne referred M. Bové's specimens, is essentially different, as I shall hereafter shew.

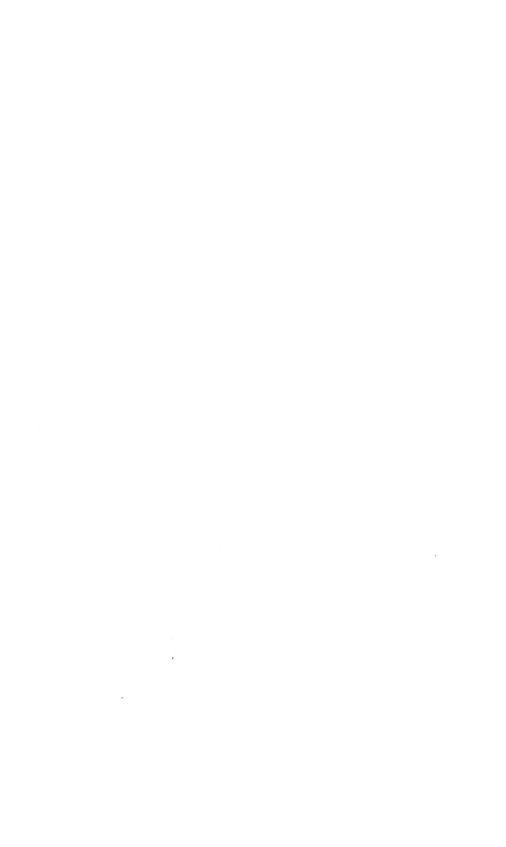
It is not improbable that C. maroccana is a mere variety of C. heterophylla, t. 1847; to which it approaches very nearly in some respects. Independently however of the form and colour of the fruit, and of the shape of the leaves, by

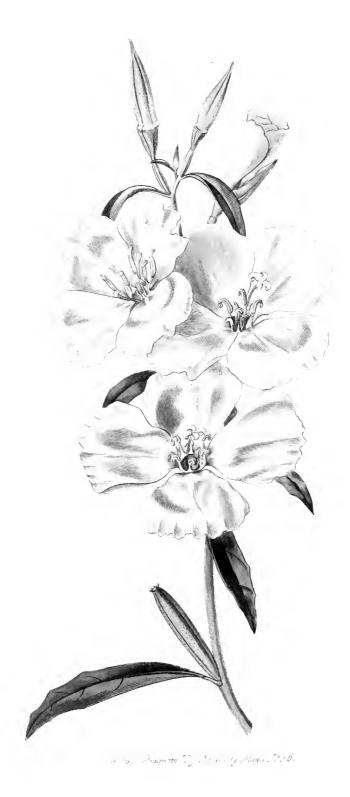
C. maroccana; foliis cuneatis glabris 3-5-fidis 3-lobisque lobis integris sub-falcatis, calycibus glabris, fructibus subrotundis glabris dipyrenis, putamine crassissimo.

<sup>\*</sup> See folio 1161.

which these species are sufficiently distinguishable, the stipules of C. maroccana are smaller, the growth less vigorous, and the fruit has usually two stones instead of one.

The drawing was made in the Garden of the Horticultural Society.





J. Watts. 4

### 1856

## \* GODÉTIA rubicúnda.

## Ruddy Godetia.

#### OCTANDRIA MONOGYNIA.

Nat. ord. Onagraceæ.
GODETIA.—Suprà, vol. 22. fol. 1849.

G. rubicunda; erecta, foliis lineari-lanceolatis subdentatis viridibus, petalis subrotundo-cuneatis undulatis immaculatis, staminibus alternis minoribus, antheris igneis apice luteis cassis, stigmatibus pallidis, capsulis linearibus sessilibus truncatis, seminibus elongatio cuncatis.

Caulis erectus, 2-pedalis, ramosus, leviter pubescens. Folia viridia, lineari-lanccolata subdentata. Flores magni, rubicundi. Calyx tubo brevi obconico. Petala unicolora, basi exceptá igneá, subrotundo-cuneata, undulata, sepalis duplò staminibus ferè triplò longiora. Stamina alterna breviora, antheris igneis subrostratis apice recurvantibus luteis cassis. Stigmata pallida linearia reflexa. Capsula leviter pubescens, subsessilis, linearis, truncata, tetragona. Semina elongata, rhombea, cinereo fuscoque nebulosa.

A handsome species found in California by Mr. Douglas, and raised in the garden of the Horticultural Society. It forms an agreeable contrast with G. *Lindleyana*, in consequence of the want of spots, and the peculiar ruddy appearance of its petals. Flowers in July and August.

In many respects it approaches G. lepida, already figured in this work (fol. 1220); but it is abundantly distinguished by the following circumstances. The leaves are green and not glaucous, the flowers are twice as large and a bright flame colour at the base of the petals, while the purple blotch near the apex of those of G. lepida is wanting. In G. rubicunda the anthers are alternately shorter, of a rich flame colour,

except at the tips, where they are yellow, and rolled backward; in G. lepida they are all equal, of one uniform pale yellowish hue, and not turned back at the point. In G. rubicunda, the stigma is a very pale lilac, almost white, in G. lepida it is a rich dark purple; the seeds too of the former are far more slender than those of the latter species.

A hardy annual.





### \* ZYGOPÉTALUM cochleare.

Spoon-lipped Zygopetalum.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

ZYGOPETALUM, Hooker. Perianthium explanatum, sepalis petalisque ascendentibus subæqualibus, cum ungue producto columnæ connatis. Labellum muticum, indivisnm, patens, ungue ascendente: cristâ magnâ transversâ carnosâ. Columnæ brevis, arcuata, semiteres. Anthera subbilocularis. Pollinia 2, bipartibilia, in glandulam transversam subsessilia.—Herbæ terrestres, subacaules, foliis plicatis patentibus. Flores speciosi, labello cæruleo. Gen. et Sp. Orch. 187.

Z. cochleare; foliis plicatis pedunculis unifloris radicalibus solitariis duplò longioribus, sepalis petalisque ovato-lanceolatis conniventibus inferioribus majoribus, labello cochleato bilobo cristâ transversâ crenatâ.

Pseudobulbi nulli. Folia pallidè viridia obovata vel oblonga, plicata, pedem longa, infima abbreviata petiolaria. Pedunculi ex axillis foliorum infimorum, basi vaginati, uniflori, erecti, apice sub ovario bracted cucullatd oblongd. Ovarium albidum, incurvum. Perianthium semi-explanatum. Sepala ovata, subundulata, acuta, albo-viridia, lateralia majora. Petala sepalo supremo conformia et æqualia. Labellum cum columna basi paululum elongata articulatum, concavum, unciam latum,  $1\frac{1}{4}$  unc. longum, indivisum, emarginatum, extùs albidum, intus venis creberrimis atrocæruleis velutinis pictum; brevè unguiculatum, supra unguem callo lato rotundato convexo pluriès plicato et cristato instructum. Columna teres clavata, dorso viridi-alba, fronte purpureo-striata, basi paululum producta. Anthera bilocularis valvis bilabiatis. Pollinia 4, per paria incumbentia.

Beautiful as all the species of Zygopetalum are, without exception, this is perhaps upon the whole the most attractive, not only on account of the delicate waxy surface of the petals and sepals, and the peculiarly rich veining of the Lapis lazuli blue of its lip, but because of its delicious fragrance. If Lilies

<sup>\*</sup> So named by Sir William Hooker from  $\zeta \varepsilon \nu \gamma \nu \nu \omega$ , to join; in allusion to the adhesion of the segments of the perianth by their bases, in the original species.

of the Valley were growing intermingled with the plants, the air could not be more perfumed with their pure and delightful odour than it is after the curious flowers have unfolded.

Like all the other species of the genus, this is easily cultivated in earth in a damp stove. It is a native of Trinidad. The drawing was made from a specimen supplied by Mr. Knight, in August last.

1. represents a front view of the column, with the bases of the petals and lips adhering to it; 2. is a view of the fleshy ridge of the lip; and 3. shews the pollen masses and their glands.









# \* HABENÁRIA procéra.

Tall Habenaria.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Ophrydeæ.

HABENARIA, Willd. Perianthium Orchidis. Calcar elongatum. Columna libera reclinata. Anthera basibus loculorum solutis divergentibus canalibus stigmaticis adhærentibus. Glandulæ nudæ. Rostellum planum, antheræ adnatum. Processus carnosi 2 stigmatici, ultra antheram projicientes, formà varii.—Habitus Orchidis. Gen. & Sp. Orch. p. 306.

A. Erostres; ovariis pedunculatis subcylindraceis aut fusiformibus, nunquam rostratis.

§ 2. Petala indivisa. a. Labellum trifidum, laciniis filiformibus indivisis.

H. procera; caule folioso, foliis oblongis basi cucullatis patentibus sensim in bracteis decrescentibus, racemo multifloro, bracteis herbaceis inferioribus foliaceis ovarii longitudine superioribus parvis ovatis, labelli tripartiti laciniis lateralibus linearibus intermedià latiore paulò brevioribus, calcare pendulo clavato ovario duplo longiore.

Orchis procera. Swartz in Pers. syn. 2. 506. Habenaria procera. Lindl. Gen. et Sp. Orch. 318.

Caulis bipedalis, foliis circiter 5 aquidistantibus dimidiam inferiorem vestientibus. Racemus laxus, multiflorus, 8 poll. longus. Ovaria 21-poll. Sepala ovata, alba apice viridia, lateralia latiora patentissima, supremum concavum cum petalis ovatis erectis albis dorso viridulis galeam referentibus. Labellum ferè pollicem longum, album, laciniis apice luteo-viridibus. Calcar 3\frac{1}{3}-poll. longum, basi album, cæterùm viride. Columna parva, alba, carnosa, reclinata, auriculis (staminibus ster.) rotundatis. Anthera ochracea, loculis distantibus basibus elongatis, paululum incurvis, a canalibus stigmaticis facile separabilibus, caudiculam longam filiformem in gremio suo foventibus cui glandula parva pallida adnascitur. Canalia stigmatica linearia alba, truncata, crassitiei æquabilis. Rostellum planum antheræ adnatum. Processus carnosi herbacei, ultra os calcaris arcuatim projicientes, et canalibus stigmaticis paulò longiores.

<sup>\*</sup> From habena a rein or thong, in allusion to the long strap-shaped spur.

This rare species is a native of Sierra Leone, where it was found by Afzelius many years since. It was afterwards introduced with a brief character into Persoon's Synopsis, and from that time remained unknown, until it was imported last year by Messrs. Loddiges, in whose stove it flowered in August.

It offers an excellent illustration of the characters of the curious genus Habenaria, as limited in the genera and species of Orchideous plants, and will shew the student in a distinct manner what the points are in which it differs from the genus Platanthera, whither I refer our British Butterfly Orchis, to which this bears a striking resemblance. In order to make this clear, attention should be paid to the magnified figure of a column extracted from the flower, and placed at the right hand corner of the accompanying plate. the lower white portion to the left is the column, with an auricle or sterile stamen at its upper corner to the right. Immediately proceeding from this in a curved direction upwards are the white stigmatic canals, in whose hollow the lengthened bases of the anther are placed when in their natural position. The upper yellow body which divides downwards into two legs is the anther; the legs are its lobes, which lengthen at their lower end and fit into the stigmatic canals, enclosing the pollen masses in their upper portion, and in their lower keeping the caudicle of the pollen in such a position that it must inevitably come in contact with the gland which once formed the tip of the stigmatic canal, but which eventually separates from the latter, adhering to the caudicle, as is seen in the thread-shaped processes, which in the figure rise up from the anther-bases. All these parts equally exist in the genus Platanthera. But in Habenaria we find an addition of two greenish horns, which spring from the lower edge of the stigma, skirting the orifice of the spur, and finally project beyond the latter, as is seen in the These horns, which are considered to be processes of the stigma, do not occur in *Platanthera*, unless in a very rudimentary state, while in Habenaria they are always so fully and obviously developed as to form conspicuous objects, even when the flowers are dried.

It may appear to some Botanists that this is but a slight distinction upon which to found a genus. But it is to be remembered, firstly, that it is a decided organic difference, inasmuch as it is the developement of a new organ in the apparatus for reproduction; secondly, that it is a constant and obvious character which in many cases is far more remarkable than even in the species before us; and moreover, that after being limited within the comparatively narrow bounds that I have assigned it, and after striking off the genera Bonatea, Peristylus, Platanthera, Aopla, and another or two, the genus Habenaria still comprehends no fewer than eighty-five well ascertained species, to which many more will doubtless have to be added.

This plant must have the heat of a damp stove, when in a growing state, but will doubtless partake of the habits of its kindred species in requiring a long period of coolness and dryness, while its roots are at rest, after the leaves have perished.







## \* CATTLEYA labiáta.

Crimson-lipped Cattleya.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Epidendreæ. CATTLEYA.—Suprà, vol. 14. fol. 1172.

C. labiata; sepalis lineari-lanceolatis, petalis membranaceis lato-lanceolatis acutis subundulatis, labello obovato undulato obtuso indiviso, pseudobulbis oblongis angulatis, spathâ maximâ foliaceâ. Gen. § Sp. Orch. pl. p. 116.
C. labiata. Lindl. Collect. Bot. t. 33. Hooker Exot. fl. 157. Lodd. Bot. Cab. t. 1856.

A native of Brazil, whence it was introduced about 18 years ago by Mr. William Swainson. It has since that time been represented in most of our Botanical periodicals, so that I fear I shall hardly stand excused for reproducing it here. Nevertheless, all the plates above quoted are deficient in the richness of colour that is so peculiarly characteristic of the species, and that constitutes its chiefest ornament; and the knowledge of the existence of so truly beautiful species cannot be too widely diffused, the more especially as this, like the rest of its genus, requires the excessive heat and dampness of an Orchideous house in a less degree than many other kinds.

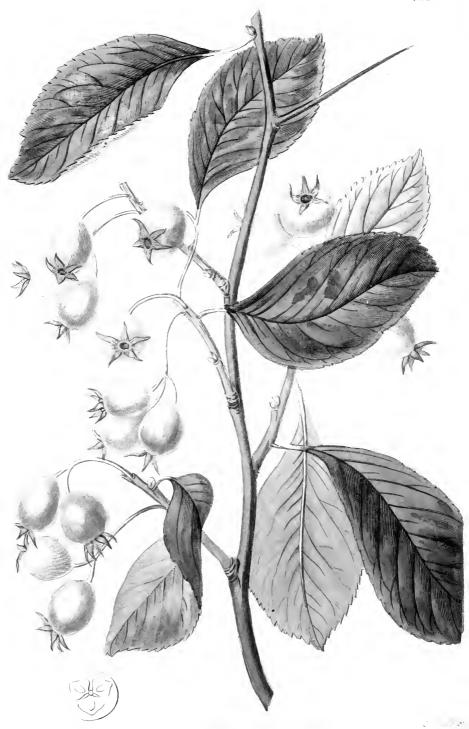
It is one of those plants which flourish so remarkably in the hothouse at Wentworth, with no greater dampness and heat than can be endured by human beings without inconvenience.

<sup>\*</sup> See folio 1406.

The specimen selected for representation in this place is a small one, with its colours remarkably rich and well developed; it is figured in the Botanical Cabinet with four flowers in a cluster, and I have seen it with six. In such a state, and with several stems, each laden with flowers in a similar manner, there is certainly no plant of which I have any knowledge that can be said to stand forth with an equal radiance of splendour and beauty. For it is not merely the large size of the flowers, and the deep rich crimson of one petal contrasted with the delicate lilac of the others that constitute the loveliness of this plant, it owes its beauty in almost an equal degree to the transparency of its texture, and the exquisite clearness of its colours, and the graceful manner in which its broad flag-like petals wave and intermingle when they are stirred by the air, or hang half drooping half erect when at rest and motionless.

The drawing was made in the garden of the Horticultural Society in October last.





## \* CRATÆGUS Crus Galli, var. ovalifolia.

## Oval-leaved Cockspur Thorn.

#### ICOSANDRIA DI-PENTAGYNIA,

Nat. ord. Rosaceæ, § Pomaceæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. crus-galli; foliis obovato-cunciformibus nitidis glabris tardè deciduis, spinis longissimis validis, pedicellis glabris, fructibus pyriformibus 3-pyrenis.

C. crus-galli. Linn. Sp. pl. 632. DC. prodr. 2. 626.

Mespilus Crus Galli. Poir. dict. 4. 441.

C. lucida. Wangenh. am. t. 17. f. 42.

Mespilus lucida. Ehrh. Dum. Cours. Bot. cult. ed. 2. v. 5. p. 448.

? M. nana. Dum. Cours. Suppl. 386.

M. linearis. Desf. arb. 2. 156. var. ovalifolia, foliis latioribus, minus cuneatis, longiùs petiolatis, minus lucidis.

C. crus-galli ovalifolia. Loud. Arbor. Britt. t. xxxi. c. e.

C. ovalifolia. Hornem. hort. hafn. suppl. 52. DC. prodr. 2. 627.

The Cockspur Thorn is a hardy small tree, found wild in North America, in woods and hedges and on the banks of rivers, from Canada to Carolina. Its name is derived from the length of its powerful curved spines.

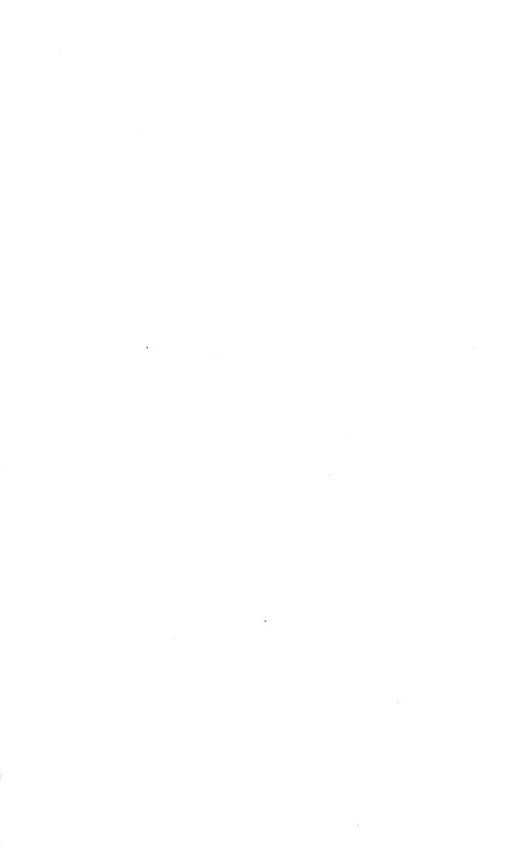
Two varieties are common in our gardens, the broadleaved and the Pyracantha leaved, both which have remarkably smooth shining leaves, and rather a dense mode of branching. This, which is less known to the Nurserymen, has more oval and less shining leaves, and a more open head.

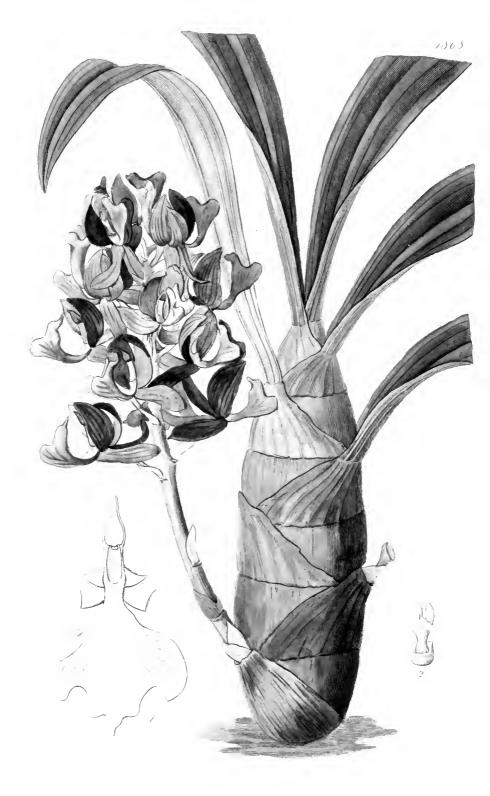
It has been described as a distinct species, but I think Mr. Loudon right in looking upon it as a mere variety of C. crus-

<sup>\*</sup> Sce folio 1161.

galli. Sometimes it passes in the nurseries under the name of C. pennsylvanica.

A particularly handsome tree, in even this handsome genus. No trace of the variety has been remarked in a wild state, and it is not improbable that it is altogether of a garden origin.





# \* MORMÓDES atropurpurea.

Dark-purple Mormodes.

### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

MORMODES. Lindl. Sepalum superius subfornicatum, angustum; lateralia conformia reflexa. Petala latiora, conformia, erecta. Labellum sellæforme, ascendens, trilobatum, subcuncatum, apiculatum, cum columna articulatum. Columna semiteres, mutica; gynizus longus angustus; clinandrium postice acuminatum. Pollinia 4, per paria connata, caudiculæ crassæ affixa, glandulæ carnosæ crassæ adhærenti.—Habitus Cataseti. Lindl. Nat. Syst. of Botany, ed. 2. p. 446.

Mormodes atropurpurea.

Pseudobulbi caulescentes, Cataseti facie, polyphylli, oblongi, basibus foliorum distantibus vaginantibus imbricati. Folia plicata (Cataseti), 3-5-costati, erecti, apice recurvi. Racemus lateralis, densus, oblongus, pedunculatus, pseudobulbo altior. Flores atropurpurei. Sepala lineari-oblonga æqualia, reflexa, basibus lateralium paulò obliquis et ungui labelli adnatis. Petala ovata, erecta, supra columnam conniventia. Labellum replicatum, retrorsum arcuatum, circumscriptione cuneatum, leviter unguiculatum, trilobum, lateribus deflexis venosis, lobo intermedio magis carnoso, cuspidato, subtrilobo. Columna compressa, rostrato-acuminata, cum labello continua, erecta, mutica, antherà posticè rostrata, gynizo oblongo. Pollinia 4, per paria connata, caudiculæ subcucullatæ adnata, glandulá concavá crassá.

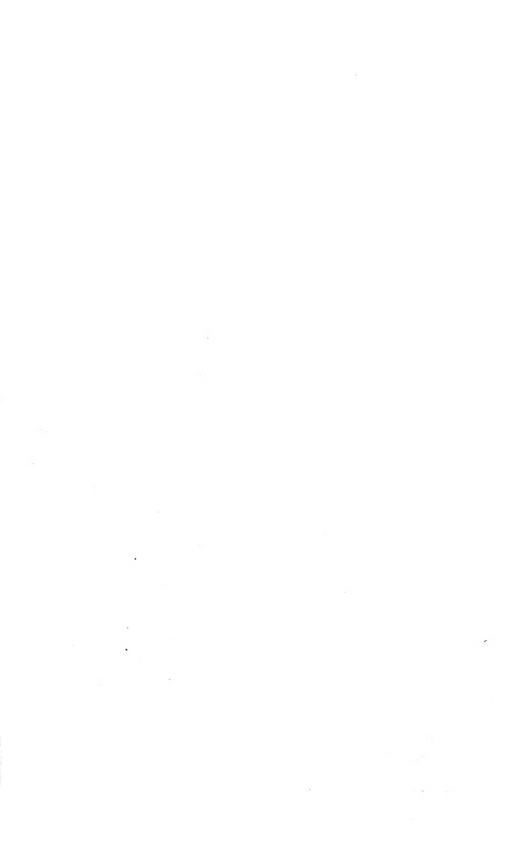
Sent to me in December last from the garden of John Willmore, Esq. of Oldford near Birmingham, with whom it then flowered for the first time. It had been imported from the Spanish Main in 1834. It is a new genus, differing from Catasetum and Myanthus in the want of cirrhi upon the column, and from Monachanthus in its lip (fig. 1.) being membranous and curved upwards, with the sides turned down-

<sup>\*</sup> From  $\mu o \rho \mu \dot{\omega}$  a frightful-looking object, a goblin, in allusion to the strange-appearance of the flowers.

wards, like the sides of a saddle, instead of being fleshy and helmet-shaped.

The leaves are pale green; the flowers one uniform rich purple.

A tender stove plant, requiring the same treatment as Catasetum, Cycnoches, &c. With reference to Orchideous plants, with this habit, it may in general be observed, that they require to be kept cool and dry when not in a growing state, to be forced gently into growth, and when in the full vigour of their vegetation to have a copious supply of moisture. They will at that season even introduce their roots into water, if they are allowed, and flourish the more under such treatment.





### 1862

# \* KENNÉDYA? macrophylla.

Large-leaved Kennedya.

#### DIADELPHIA DECANDRIA.

Nat. ord. Leguminosæ or Fabaceæ. KENNEDYA.—Suprà, vol. 11. fol. 944.

§ 2. Foliis 3-foliolatis, carind vexillo et alis breviore.

K. macrophylla; foliolis 3 ovato-oblongis retusis mucronulatis petioli longitudine, stipulis setaceis petiolulis æqualibus, racemis multifloris foliorum longitudine.

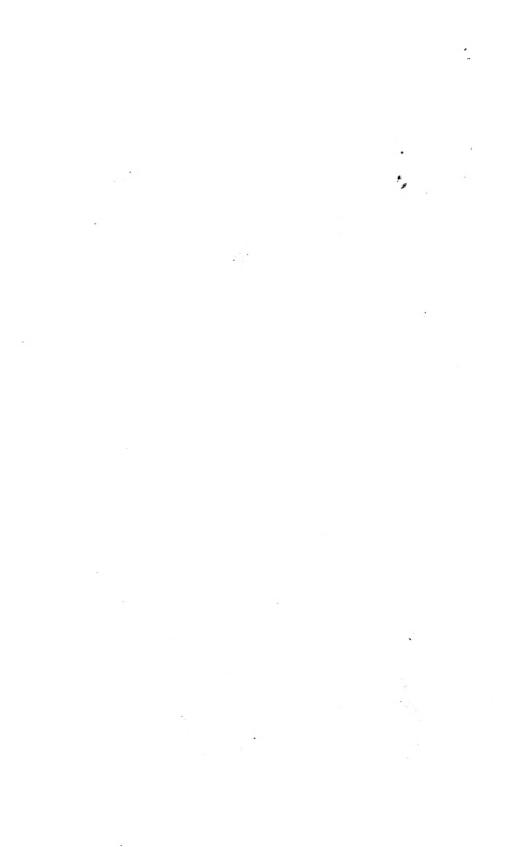
A beautiful greenhouse twining shrub, introduced by Sir James Stirling from Swan River in New Holland. It was raised in the garden of Robert Mangles, Esq. at Sunning Hill, from whence specimens were received in the course of last summer.

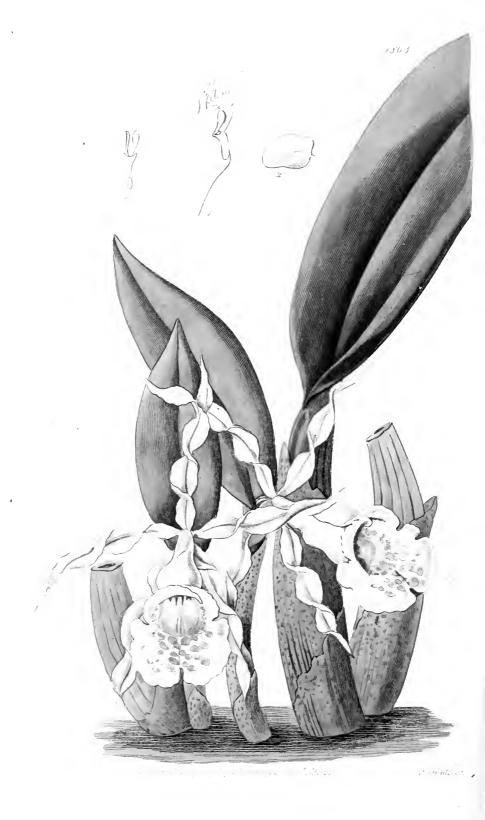
It is in many respects so much like K. Comptoniana as to render it doubtful whether it is more than a variety of that species. It appeared, however, to differ in being altogether a more vigorous plant; its leaf-stalks were as long as the leaflets and not shorter; the reticulations of its leaves were more coarse; and I did not remark any tendency to produce those linear leaflets which always accompany the original K. Comptoniana.

This will be usually trained to the rafter or column of a greenhouse; but a pretty mode of managing such plants is that, practised in the garden of Mrs. Lawrence, of twining the

<sup>\*</sup> See folio 1421.

stems round and round to stakes fixed into the sides of the pot, so that the plant is compelled to grow round itself. The result of this is the collection into the compass of a bush of hundreds of clusters of flowers, which would otherwise be scattered over the roof of a greenhouse, and too far removed from the eye to enable the beautiful form and colour to be distinctly seen.





## 1863

## TRICHOPÍLIA tórtilis.

Twisted-petalled Trichopilia.

### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

TRICHOPILIA. Lindl. Sepala et petala æqualia, patentia, angusta. Labellum magnum, petaloideum, convolutum, c. columna parallelum, trilobum, lobo intermedio sub-bilobo planiusculo; intus nudum. Columna teres, clavata. Clinandrium cucullatum, 3-lobum, villoso-fimbriatum. Anthera 1-locularis, compressa, antice convexa. Pollinia 2, postice sulcata, caudiculæ tenui cuneatæ adhærentia; glandulâ minimâ.—Pseudobulbi carnosi, vaginis maculatis supertecti, monophylli, coriacei. Flores solitarii axillares. Lindl. Natural System of Botany, ed. 2. p. 446.

Trichopilia tortilis.

Pseudobulbi oblongi, sulcati, compressi, vaginis fusco-maculatis arctè vestiti, aliquandò folii fere longitudine. Folia solitaria, oblonga, coriacea, acuta, plana, v. leviter complicata. Flores solitarii, axillares, horizontales, sessiles. Sepala et petala æqualia, lineari-lanceolata, patentissima, spiraliter torta, margine crispatula, fusco-lutea, disco latentia. Labellum 2-poll. longum, circa columnam convolutum, album, maculis pluribus magnis inæqualibus ad interius; limbo 3-lobo intermedio subbilobo. Columna cum ovario continua, teres, clavata, alba; clinandrio cucullato trilobo; lobis ascendentibus, falcatis, ciliato-laceris. Anthera compressa, apiculata. Pollinia 2, parva, pyriformia, posticè sulcata, caudiculá cuneatá inserta, glandulá minimá ovali. Gynizus excavatus, paululum obliquè retrorsum versus.

A beautiful and highly curious plant, introduced from Mexico in 1835, and communicated in January last by George Barker, Esq. of Springfield near Birmingham. In many respects the genus approaches Maxillaria, but differs in the column not being reclinate upon the ovary and subtended by the partially united lateral sepals, in the regular

<sup>\*</sup> From  $\theta \rho i \xi$ ,  $\tau \rho i \chi \delta_{\mathcal{C}}$  hair, and  $\pi i \lambda i \rho \nu$  a cap; the anther of this genus is concealed below a cap surmounted with three tufts of hair.

expansion of both sepals and petals, and especially in the singular column, (fig. 1.) terminated by three little plume-like lobes which unite at their bases into a sort of hood, that covers over a remarkably compressed anther (fig. 2.).

The white of the lip, which is very clear and pure, forms a brilliant contrast with the rich blotches of deep crimson that ornament the interior of the little funnel formed by the rolling of the lip round the column.

From the habit of this plant it may be conjectured that it will thrive in the stove, under the same treatment as Maxillarias.





J. Watts. ov.

# \* LÝCHNIS Bungeána.

Bunge's Lychnis.

#### DECANDRIA PENTAGYNIA.

Nat. ord. SILENACEÆ (CARYOPHYLLEÆ). LYCHNIS.—Suprà, vol. 6. fol. 478.

L. Bungeana; calycibus clavatis pedicello bracteisque longioribus, petalis incisis, foliis ovatis lanceolatisque pubescentibus, floribus solitariis.
 Lychnis Bungeana. Fischer MSS.
 Agrostemma Bungeana. Don in Sweet's Fl. Garden, t. 317.

A very beautiful species, sent to England last year by Dr. Fischer of St. Petersburgh. It is not quite hardy, suffering both from the dryness and the coldness of the open air, but thriving well in a cool greenhouse or frame, if fully exposed to light. If the latter point is not attended to the specimens become weak, and the brilliancy of the flowers is impaired.

It strikes freely from cuttings, and will soon become common enough. The accompanying drawing was made in the garden of the Horticultural Society in August last.

The species is very like a one-flowered state of L. fulgens.

<sup>\*</sup>  $\Lambda\nu\chi\nu\sigma\varsigma$  a lamp, is said to have given its name to this genus, because the cottony leaves of some species were employed as wicks for lamps.

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co . Weste or

### 1865

# \* DENDRÓBIUM macrostáchyum.

Long-spiked Dendrobium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Malaxideæ. DENDROBIUM.—Supra, vol. 7. fol. 548.

D. macrostachyum; caulibus teretibus pendulis flagelliformibus, foliis ovatolanceolatis submembranaceis, floribus ternatis racemum spurium formantibus, sepalis ovatis acutis, petalis lanceolatis sepalo supremo subæqualibus, labello cucullato venoso: limbo ovato obtuso ciliato intus pubescente. Gen. & Sp. Orch. 78.

A native of Ceylon, where it was discovered by the late Mr. James Macrae, who some years ago sent me dried specimens and a drawing of it. Upon the former I found a minute blanched portion that seemed still alive; this was fastened by a nail and shred to a damp shady wall in a stove in the garden of the Horticultural Society, where it gradually recovered its green colour and began to grow. By tending it carefully, and not feeding it until it had recovered the effects of its long fast while buried between two sheets of brown paper in a dry chest, it gradually recovered and grew into a plant, the offspring of which has been distributed. From one of them, which flowered in the garden of Mr. Bateman, the accompanying drawing was prepared in June last.

The species approaches to *D. Pierardi*, *cucullatum*, and *pulchellum*, than all of which it is less beautiful, and it requires precisely the same treatment as those species.

<sup>\*</sup> See folio 1249.







## \* MANÈTTIA cordifólia.

Heart-leaved Manettia.

#### TETRANDRIA MONOGYNIA.

Nat. ord. CINCHONACEE.

MANETTIA, Mutis. Calycis tubus turbinatus, limbus partitus in lobos tot quot corollini aut dupli, lobulis in sinubus sæpè interpositis. Corolla infundibuliformis, tubo tereti, fauce piloso-hirsutâ, lobis 4, rarissime 5. Antheræ in fauce sessiles. Capsula ovata, compressa, calycinis lobis coronata, ab apice ad basin septicidò dehiscens, mericarpiis cymbiformibus. Placentæ à septo subexsertæ. Semina imbricata subsessilia peltata, margine membranaceo sæpiùs dentato undiquè alata. Embryo erectus in albumine carnoso; cotyledonibus foliaceis lanceolatis.—Herbæ perennes, suffruticesve. Caules et rami volubiles, graciles. Folia ovato-oblonga, aut subcordata. Stipulæ latæ, breves, acutæ, sæpius cum petiolorum basi subconcretæ. Pedunculi axillares uni aut multiflori. DC. prodr. 4. 362.

M. cordifolia; caule herbaceo volubili tereti scabriusculo, foliis ovatis basi cordatis apice acutis utrinque subtiliter pubescentibus, pedunculis axillaribus 1-floris. DC. l. c.

M. cordifolia. Mart. spec. mat. med. bras. p. 19. t. 7.

A beautiful hothouse climber, running to the length of four or five feet, and clothed with a profusion of scarlet trumpet-shaped flowers in the month of June. It strikes freely from cuttings.

It has already been so well described by Dr. von Martius that I have nothing to add, except that I do not find the corolla hairy on the inside; the ovules are arranged in an unusual manner, upon cylindrical placentæ, which spring from near the base of the dissepiment, (fig. 1 and 2).

<sup>\*</sup> So called after Xavier Manetti, a Professor of Botany at Florence, who published a work on Italian Fruit Trees in 1751.

A native of hedges and copses, and the skirts of forests in Brazil, near Villarica and elsewhere in the Province of the Mines, where it is accounted a potent medicine in cases of dropsy and dysentery. The bark of its root is powdered, and administered in doses from  $\frac{1}{2}$  to  $1\frac{1}{2}$  drachm; it acts as an emetic.





## \* EPIDÉNDRUM armeniácum.

Apricot-coloured Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord Orchidaceæ, § Epidendreæ. EPIDENDRUM.—Suprà, vol. 1. tab. 17.

E. armeniacum; caulibus teretibus, foliis lanceolatis coriaceis acutis subplicatis, racemis pedunculatis cylindraceis nutantibus, sepalis patulis ovatis acutis, petalis setaceis, labelli subcucullati laciniis lateralibus rotundatis intermediâ ovatâ acuminatâ: callo magno oblongo in disco.

Caules erecti, compressi, semipedales, foliis 3-4ve distantibus in spatham abeuntibus vestiti. Racemus 3-4 poll. Flores minuti armeniaci coloris. Bracteæ setaceæ ovario triplò breviores.

A native of Brazil, where it was found in company with Grobya Amherstiæ, figured at fol. 1740 of this work. It was first seen in England in flower in the year 1835, at one of those splendid exhibitions in the Garden of the Horticultural Society, which attest more strongly than even the country residences of our nobility and gentry, the skill and perseverance of English gardeners. There, in the midst of the dazzling scarlet or pink of various kinds of Cacti, and surrounded by the brilliant plumes of Chinese Azalea flowers, that weighed down their graceful branches, which really seemed as if they were proud of their lovely burthen, from a basket of humble moss, a little tuft of stems of this species was seen to rear its modest head, as if in hopelessness of attracting notice in so gay a company. The neatness however of its tiny flowers, the pleasing tint of its apricot-coloured petals, the elegant form of their slightly nodding or even drooping clusters, and the novelty of their form in so well known a genus as

<sup>\*</sup> Sce folio 1415.

Epidendrum, arrested the curious observer, who soon found the symmetry and simple elegance of the little blossoms of Epidendrum armeniacum compensate for the absence of those more obvious beauties that adorned its gaudier rivals.

It is a stove plant, increasing readily by division of its tufted stems, like E. elongatum, and the kindred of that common species. It was imported by Messrs. Rollissons of Tooting, to whom I was indebted for a specimen in the month of June.

Fig. 1, is a profile view of the lip, with its column; Fig. 2, is the lip cut from the column, and viewed from above, with the great callus that occupies its middle; Fig. 3, represents the pollen masses, with their powdery reflexed caudicle.





# \* CRATÆGUS prunifólia.

Plum-leaved Thorn.

ISOCANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. prunifolia; foliis oblongis inæqualiter serratis glabriusculis, spinis mediocribus rectis, pedunculis villosis, fructibus oblongis dipyrenis.
C. prunifolia. Bosc. in DC. prodr. 2. 627.
Mespilus prunifolia. Poir. Dict. 4. 443.

Apparently a distinct species of Thorn in the way of C. crus-galli ovalifolia, from which it is readily known by its shaggy flower-stalks, and its less pear-shaped fruits, each of which contains 2 instead of 3 stones.

Its mode of growth is very much that of the broad-leaved Cratægus Crus Galli, but it is a taller tree, with a richer green in the summer, and a deeper tint of crimson in its autumnal leaves. It does not lose its leaves till late.

Said to be a native of North America.

<sup>\*</sup> Sec fol. 1161.





### \* HYACÍNTHUS spicátus.

Spike-flowered Hyacinth.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Liliaceæ. HYACINTHUS.—Suprà, vol. 5. fol. 398.

H. spicatus; corollis campanulatis semisexfidis spicatis, staminibus membranaceis. Smith prodr. fl. Gr. 1. 237.

Folia linearia, debilia, humifusa, 6 poll. circiter longa, lætè viridia. Scapus erectus, nudus, 2 poll. longus, spicam gerens brevem densam subovatam8-9-floram. Bracteæ membranaceæ, diaphanæ, cuique flori duæ, inæquales, oppositæ, semisagittatæ, subdentatæ. Perianthium campanulatum, semisexfidum, laciniis patentibus, apice revolutis, lacteis, per axin cæruleis. Filamenta membranacea, 3-dentata, dente medio antherifero, inter se et cum tubo perianthii connata. Antheræ atrocæruleæ sessiles in fauce tubi. Ovarium subrotundum, ovulis aliquot teretibus a placenta centrali radiantibus.

Ripe seeds of this plant were gathered in April, 1826, in the island of Zante, by H. F. Talbot, Esq. and were raised in his garden at Lacock Abbey, Wilts, whence a drawing and specimen were communicated to me in February last.

<sup>\* &#</sup>x27;Yakur 30c, a name adopted from the ancient Greeks, who applied it to the flower supposed to have sprung from the blood of Hyacinthus, the favourite of Apollo, when accidentally slain. Great differences have arisen amongst commentators concerning the plant of the ancients, which we cannot presume to settle, but there seems no paramount authority for the present application of the name in question.—Smith. Linnæus supposes it to have been the wild Larkspur, Sprengel the common Gladiolus or Cornflag, Martyn and Fée the Martagon Lily, while others have endeavoured to show that the Hyacinths of the Greeks were the same as the Vaccinia nigra of Virgil, or the bilberries of the English, the Vaccinium Myrtillus of Botanists.

Mr. Talbot considers it to be the rare and little known H. spicatus of Smith, which Dr. Sibthorp also gathered in the island of Zante, where it is said to be called Borboi. As a species it is well marked by its crowned sessile half erect flowers, and the double membranous bracts that subtend it. These are unequal, attached as it were by one edge, and slightly toothed; they are correctly represented at fig. 2. Fig. 1, shews the structure of the perianth when cut open.





### 1870

## \* EPIDÉNDRUM clavatum.

Club-stemmed Epidendrum.

GYNANDRIA MONANDRIA.

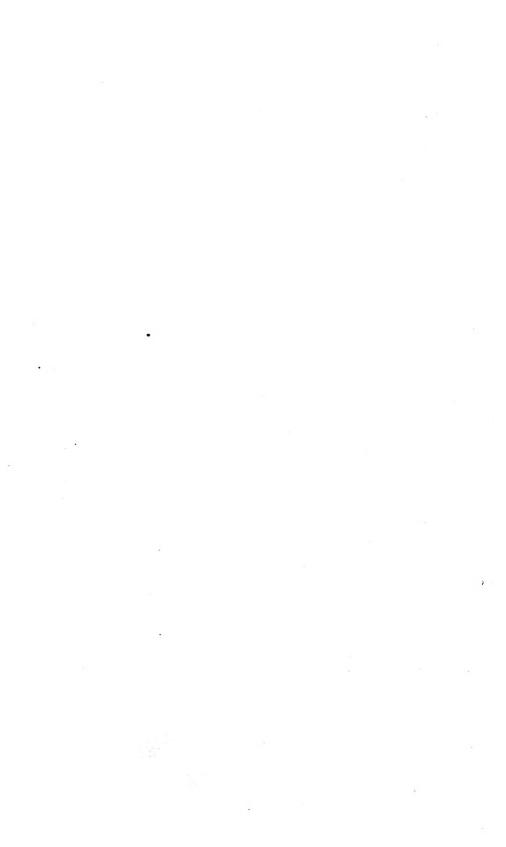
Nat. ord. Orchidaceæ, § Epidendreæ. EPIDENDRUM.—Suprà, vol. 1. fol. 17.

E. clavatum; caule clavato in pseudobulbum ovale desinente diphyllo, foliis lanceolatis patulis, racemo simplici subæquali, bracteis ovatis canaliculatis acutis ovariis inferioribus duplo brevioribus, sepalis petalisque lanceolatolinearibus æqualiter patentibus, columnâ clavatâ, labelli tripartiti basi bicallosi laciniis lateralibus ovatis subfalcatis margine posteriore denticulato: intermediâ unguiculatâ laminâ ovatâ acuminatâ.

Caules vetusti duri, clavati, subarticulati, erecti, in pseudobulbum ovale desinentes, vestigiis foliorum vaginantium vestiti, diphylli, foliis lanceolatis, patulis, coriaceis. Pedicelli florum inferiorum elongati sed non corymbosi. Ovaria filiformia. Sepala et petala viridia ferè unciam longa, angusta. Columna virens. Labelli lamina nivea.

Found in August, 1834, near Cumana. Communicated to this work in July, 1835, by the late Lord Grey of Groby. It is not a pretty species, but it is very distinct from any previously described, and is remarkable for its stems being dilated at the upper end, like some of the species of Dendrobium.

The station of the plant will be near Epidendrum concolor. It was procured by Mr. John Henchman for Messrs. Lowe and Co. of Clapton, by whom it was introduced along with Trichopilia tortilis and Mormodes atropurpurea.







## \* MAXILLÁRIA aromática.

#### Aromatic Maxillaria.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

MAXILLARIA.—Suprà, vol. 11. fol. 897.

M. aromatica; pseudobulbis ovatis compressis, foliis pluribus oblongo-lanceolatis plicatis scapis unifloris erectis longioribus, sepalis ovato-oblongis petalisque conformibus acutis, labelli semicylindracei laciniis lateralibus porrectis subulatis; intermediâ bilabiatâ! labio superiore truncato nano inferiore spathulato apice recurvo serrulato. Gen. & Sp. Orch. pl. p. 146.

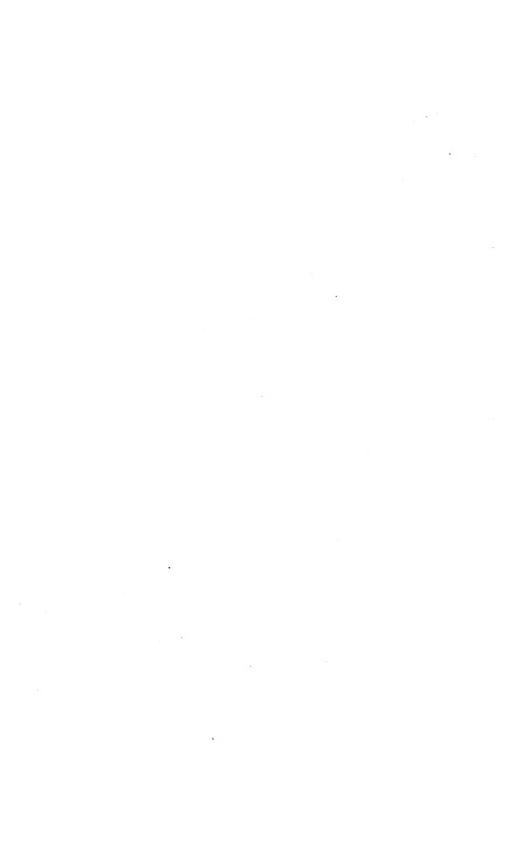
M. aromatica. Graham in Hooker's Exot. ft. 219.

Colax aromaticus. Spreng. cur. post. 307.

A fragrant stove plant, breathing cinnamon and sweet spices, found in Mexico, whence it was sent by Lord Napier to the Botanic Garden, Edinburgh, previous to the year 1826. The species is now not uncommon in good collections, flowering abundantly in the month of May.

The callosity of the disk of the lip of Orchideous plants, which sometimes appears in the form of lamellæ, following the course of the veins, and sometimes is a thick tuberele, in the present species is a truncated plate, occupying the base of the middle segment of the lip, and looking like the half of a petal laid over the true lip. What is the real nature of this truncated plate?

<sup>\*</sup> Sce folio 1428.







## \* CRÝBE rósea.

### Pink-flowered Crybe.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Arethuseæ.

CRYBE, Lindl. Sepala et petala similia, lanceolata, conniventia; lateralibus basi obliquis. Labellum multo majus, membranaceum, cucullatum, nunquam expansum, cum columna clavata marginata semi-connatum. Lindl. Nat. Syst. of Botany, ed. 2. p. 446.

Crybe rosea.

Pseudobulbi subrotundi, virides, leviter angulati. Folia ex apice erumpentia, lanceolata, plicata, subterna, lætè viridia, pedalia. Spica 3-4-flora, scapo laterali, basi purpureo, squamis circiter 3 distantibus vaginati. Flores penduli, ovario brevi, arcuato, bractea subulato-ovata 3-plò longiore. Flores fere 2 pollices longi, clavati, nunquam expandentes. Sepala æqualia, obovato-lanceolata, basi adhærentia, pallidè viridia, apice purpureo-maculata. Petala subæqualia, subalba, purpureo tincta, membranacea. Labellum longius, obovatum, acutum, atropurpureum, marginibus plicato-crispis inflexis, basi cum columna semiadnatum. Columna clavata, basi teres, ultra insertionem labelli marginata, paulo supra labellum bidentata, apice paululum cucullata. Anthera terminalis, opercularis, polline granulari.

A native of Mexico, whence it was imported by Messrs. Loddiges, in whose stove it blossomed in June last.

This plant is remarkable for never expanding its singular club-shaped flowers, which always remain as much closed as is represented in the accompanying figure, the edges of the lip turning inwards, and forming a sort of dish at the end of the flower.

The genus is nearly allied to the North American Arethusas, from which the adhesion of its labellum to the base of

<sup>\*</sup> From κρύπτω to conceal, whence κρυβείς concealed, in allusion to the manner in which the column is hidden by the floral envelopes.

the column sufficiently distinguishes it, independently of the remarkably property of always keeping its flowers closed.

A stove plant, requiring the same management as the common Bletia verecunda, and the like.





# \* KÉRRIA japónica.

Japan Kerria.

#### ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Spirææ.

KERRIA, DC. Calyx 5-fidus, lobis ovatis, 3 obtusis, 2 apice callosomneronatis, æstivatione imbricatis. Petala 5, orbiculata. Stamina circiter 20, cum petalis e calyce exserta. Carpella 5-8 libera, glabra, stylo filiformi superata, globosa, ovulo 1 lateraliter adhærente fæta.——Suffrutex, cortice lævi virescente, ramis virgatis, foliis ovato-lanceolatis grossè et inæqualiter serratis penninerviis conduplicatis, stipulis lineari-subulatis, floribus flavis facile plenis. Prodr. 2. 541.

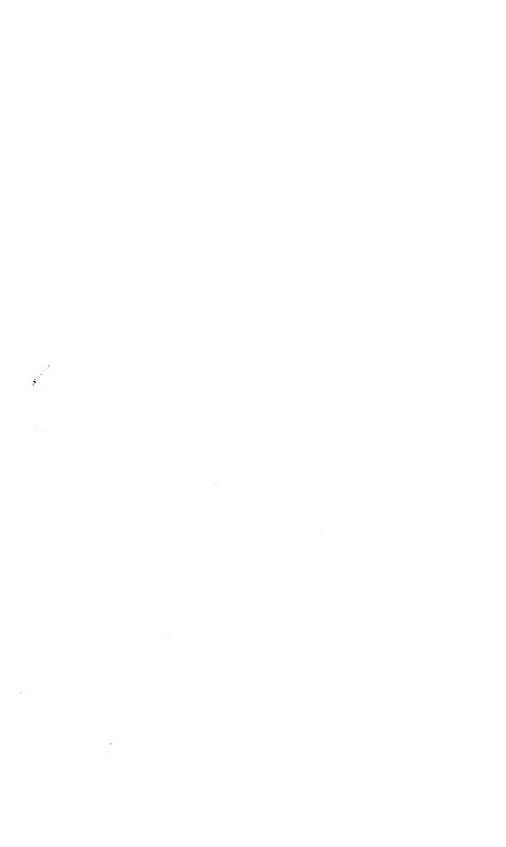
Kerria Japonica. DC. Trans. Linn. Soc. Lond. 12, 156.
Corchorus Japonicus. Thunb. ft. jap. 227. Bot. Rep. t. 587. Bot. Mag. t. 1296. with double flowers.

This plant, in the state when it bears double flowers, is one of the commonest shrubs in our gardens. It was supposed to be a species of Corchorus until Professor De Candolle investigated its affinities, and decided that it was to Rubus and Spiræa that the plant was really allied, and not to any Tiliaceous genus.

The correctness of this opinion has been fully proved by the single-flowered plant, now represented, for which the country is indebted to John Reeves, Esq. It was imported by him two or three years back, and now exists in several collections. The accompanying figure was made last September in the garden of the Horticultural Society.

<sup>\*</sup> Named in compliment to Mr. William Ker, a botanical collector sent from Kew to China.

It did not produce any fruit, but the carpels remained a long while upon the flower-stalk before they fell off. It is probable that its nearest affinity will be found to be with Neillia.





# \* CRATÆGUS platyphylla.

Broad-leaved Thorn.

ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, \$ Pomeæ. CRATEGUS.—Suprà, vol. 13. fol. 1128.

C. platyphylla. Supra, fol. 1128. in textu. C. fissa. Hort. nec Boscii.

Certainly in foliage and elegance of general appearance this is the handsomest of the European Hawthorns. It grows like an exceedingly vigorous Oxyacantha, spreading its gracefully bending arms on all sides; its leaves are a deep rich green, it is loaded with large masses of snow-white blossoms long after the common hawthorn is flowerless, and it retains its vigour till late in the autumn, so that the rich colour of its blackish purple fruit is not impaired in effect by the fading tints of the foliage.

That this is some European or North-Asiatic plant, cannot well be doubted, and yet it is not to be traced in books, unless it is the Cr. melanocarpa of Bieberstein; but that

C. platyphylla; foliis pinnatifidis basi truncatis cuneatisque laciniis apice serratis subtus ramulisque pubescentibus, stipulis semicordatis dentatis integrisque, cymis villosis, pomis oblongis nigris pubescentibus tripyrenis, laciniis calycis erectis integris.

plant, which is a native of the Crimea, is described as having trifid leaves, reflexed calycine segments, and five stones in each haw. I therefore presume that it must be different from this which has only three stones.

The drawing was made last October in the garden of the Horticultural Society.

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### \* BIFRENÁRIA aurantiáca.

Orange-coloured Bifrenaria.

#### GYNANDRIA MONANDRIA.

Nat. ord. ORCHIDACEE, § VANDEE.

BIFRENARIA, Lindl. Sepala patula, libera, subæqualia; lateralia cum basi productâ columnæ connata vix basi obliqua. Petala sepalis duplo minora. Labellum cum pede mucronato columnæ articulatum, cucullatum, trilobum, medio callosum. Columna brevis, semiteres, mutica. Anthera mutica, subcristata. Pollinia 4, per paria incumbentia, caudiculis duabus distinctis materiei viscidæ rostelli adhærentibus, glandulâ (oblongâ).——Epiphyta pscudobulbosa, Maxillariæ (Colacis) habitu. Gen. et Sp. Orch. 152.

B. aurantiaca; pseudobulbis subrotundis compressis diphyllis, foliis oblongis plicatis racemi erecti longitudine, petalis erectis, labelli lobis lateralibus semi-cordatis intermedio transverso ovali subundulato basi bicalloso, columnà pubescente.

Perianthium bilabiatum. Petala obovata, rotundata, crenata, erecta, cum sepalo supremo oblongo acuto labium supremum formantia. Sepala lateralia ovata, obtusa, supra pubescentia, patentia, basi obliqua, supremo duplò latiora. Labellum cum columnæ pede producto articulatum, unquiculatum; unquis cuneatus, carnosissimus, limbi longitudine, callo transverso truncato ad apicem ubi in limbum abit; limbus tripartitus laciniá intermediá transversa apiculatá indivisá subundulatá, lateralibus erectis semicordatis, obtusis utráque flexurá elevatá baseos callum mentiente. Columna semiteres, pubescens, clinandrii dorso acuminato. Anthera triangularis: angulis pilosis, lateralibus productioribus. Pollinia 2, biloba, caudiculis totidem glandulæ communi adhærentibus.

A pretty epiphyte, native of Demerara. For the opportunity of publishing it 1 am indebted to his Grace the Duke of Devonshire, in whose hot-house at Chiswick it flowered in October, 1835.

<sup>\*</sup> So named in allusion to the double strap or frænum that connects the pollen masses with their gland.

The colours of the flowers being deep orange-yellow, mottled with deep brown spots, the aspect of this species is rather handsome. Fig. 1. represents the appearance of the lip separated from the column, and especially of the double callus at the base of its middle lobe. Fig. 2. shews the face of the column with the bases of the sepals and petals. Fig. 3. is a view of the double strap, connecting the pollen masses to the gland. Fig. 4. shews the anther removed from the column, and viewed in front.





## \* IRIS aláta.

Small-winged Iris.

### TRIANDRIA MONOGYNIA.

Nat. ord. IRIDACEÆ. IRIS.—Suprå, vol. 3. fol. 246.

I. alata; imberbis, acaulis, foliis ensiformibus, corollæ tubo longissimo laciniis interioribus minimis, styli laciniis obtusis undulatis lacinias exteriores aquantibus. Dietr. Sp. pl. 2. 436.

I. alata. Poir. iter. 2. 86. Bivona pl. sic. cent. 1. p. 44.

I. scorpioides. Desf. fl. atl. 1. p. 40. t. 6.

I. microptera. Vahl. enum. 2. 142.

I. transtagana. Brot. fl. lusit. p. 52.

Juno scorpioides. Trattin. tabul. no. 652.

Iris bulbosa latifolia 1. Clus. hist. plant. rar. p. 210.

Folia planiuscula, carinata, lorata, acuminata, nullo modo equitantia, pedem et ultra longa, paginá superiore lucidà tactu molli, inferiore opacá, margine minutissimè cartilagineo-serrulata. Flos e sinu foliorum solitarius, iisque multò brevior, e spathis duabus magnis membranuceis subherbaceis erumpens; ovario hypogæo, basibus foliorum, Croci modo, tecto. Tubus floris 6-poll. longus, et ultra, apice lætissimè purpureus; laciniæ calycinæ oblongo-spatulatæ, margine crenato-undulatæ, ascendentes, recurvæ, glaberrimæ, lincá elevatá disci intensè luteá, cæterum amænè purpureo-violaceæ maculatæ; laciniæ corollinæ spathulatæ, basi valdè angustatæ, limbo cochleato crispato, calycinis triplò breviores, rectæ, divaricatæ. Stamina calycinis opposita. Stigmata apice biloba, laciniis dimidiatis, acuminatis, laceris. Odor florum gratus inter hyacinthinum et sambucinum.

Found by Desfontaines in moist places near Algiers, flowering in the winter. According to Bivona, a native of sterile meadows and rocks in Sicily; Clusius speaks of it as a common plant in Portugal and Spain at the foot of hills,

<sup>\*</sup> See folio 1404.

especially about Antequera and Cordova, flowering in January and February.

It produces its blossoms in this country a little later; my specimens were obligingly communicated by the Honourable W. F. Strangways, from the garden of the Dowager Countess of Ilchester, at Abbotsbury in Dorsetshire, where the plant was growing in a terrace border, with no more protection than a mat-screen would afford. Its flowers have a pleasant smell, between that of the Hyacinth and the Elder.





# \* CRATÆGUS pyrifólia.

Pear-leaved Thorn.

### 1COSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. pyrifolia; foliis ovato-ellipticis inciso-serratis plicatis pedunculis juniorum ramulisque hirsutis, calycibus hirsutis laciniis glanduloso-serratis, fructibus glabris pendulis pyriformibus 3-pyrenis laciniis calycinis reflexis.

C. pyrifolia. Hort. Kew. 2. 168. De Cand. Prodr. 2. 627. Loudon's arbor. britann. t. xxxi. B. b.

One of the largest leaved species of this genus, with a good deal of beauty in the spring, when the leaves are green and the branches loaded with flowers, but less valuable as an ornament of autumn scenery, because although the tints of the orange-coloured fruit and of the foliage are pleasing, yet the tree has an open inelegant head, and the leaves drop off while the fruit remains behind adhering to the branches.

It is immediately known from all the remainder of the species by the strong plaits, which give the leaves something the appearance of being furrowed from the midrib towards the margin. A native of rocky woods in North America, from Pennsylvania to Carolina, flowering in June. The drawing was made in the garden of the Horticultural Society.

<sup>\*</sup> See folio 1161,







## \* SCILLA Cupaniána.

## Cupani's Squill.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Liliaceæ, § Scilleæ. SCILLA.—Suprà, vol. 16. fol. 1355.

S. Cupaniana. Gusson. prodr. fl. Sic. 1. 416.

S. fistulosa. Rafinesque.

Ornithogalum cœruleum. Rafinesq. Caratt. 85.

Hyacinthus stellatus cœruleus umbellatus latifolius. Cupani pamph. sic. vol. 1. t. 20.

Communicated by Henry Fox Talbot, Esq. from the garden at Lacock Abbey. The bulbs were sent by the Hon. William Strangways from Sicily, where they are found wild near Villafrata, Ogliastro, and Castrogiovanni.

A hardy bulb, of great rarity in this country, flowering in June. Its bright blue pistil contrasts in a remarkable manner with the dull purple of the remainder of the flower. It is very near the Scilla, erroneously called peruviana, which is also a Sicilian plant, but is altogether much smaller. I find the leaves edged with a broken cartilaginous margin, rather than ciliated as Gussone is represented to describe them.

S. Cupaniana; foliis lanceolatis planis brevissime densissimeque ciliatis, corymbo paucifloro, capsulis rostratis. Römer et Schult. Sp. pl. 7. 559.

See folio 1355.







## \* EPIDÉNDRUM bísidum.

Hare-lipped Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Epidendreæ. EPIDENDRUM.—Suprà, vol. 1. fol. 17.

E. bifidum; foliis in pseudobulbos subternis lanceolatis, scapo ramoso foliis multò longiore, sepalis oblongis acutis petalisque lanceolatis patentibus, labelli cuneati lobis lateralibus ovatis: intermedio maximo apice dilatato subreniformi sulcato basi in disco biappendiculato (a columna ferè libero). Gen. et Sp. Orch. pl. 100.

Helleborine flore papilionaceo. Plum. sp. 9. ic. 186. f. 1.

Epidendrum bifidum. Aubl. guian. p. 824. Swartz Fl. Ind. Occ. 3. 1489. Willd. Sp. pl. no. 3. Redout. Liliac. 84.

E. papilionaceum. West. St. Cruc. p. 230. sec. Willd.

In this state E. bifidum appeared when, in July, 1835, a specimen was communicated to me by Messrs. Loddiges. It was then very pretty, on account of the beautiful veining of its lip; but it cannot have been any thing like so handsome as Swartz describes it to be, with all the divisions of the flower bright purple, and a flowering stem three feet high and branching.

It is a very remarkable and distinct species, with a peculiar slit lip, by which it is readily known from all, except E. auropurpureum, a kind that appears to be very nearly related to it.

It is described as found upon branches of trees in the West India islands, especially St. Christophers, St. Bartholomews, and Santa Cruz. The Messrs. Loddiges had it from Tortola; Aublet found it in Cayenne.

<sup>\*</sup> See folio 1415.







ing on a different ly in the

## \* GODÉTIA vinósa.

## Wine-stained Godetia.

### OCTANDRIA MONOGYNIA.

Nat. ord. Onagraceæ.
GODETIA.—Suprà, vol. 22. fol. 1849.

G. vinosa; erecta, foliis lineari-oblongis subdentatis glabris, petalis subrotundocuneatis undulatis immaculatis, staminibus alternis minoribus, antheris phæniceis apice luteis cassis, stigmatibus pallidis, calyeis tubo laciniis triplo breviore, seminibus atrofuscis unicoloribus.

Annua, G. rubicundæ valdè affinis; sequentibus tamen notis diversa videtur. Petala pallida sunt, et paululum minora, colore vinoso levissimè suffusa. Tubus calycis vix partem terticm limbi æquat, in G. rubicunda dimidiam. Apex cassus antherarum brevior est quam in G. rubicunda. Semina atrofusca sunt et minora, nec cinereo fuscoque nebulosa. Demum planta tota habitu graciliori gaudet.

The last of the new Californian Godetias introduced by the Horticultural Society. It is in technical characters much like G. rubicunda, but is a very different looking plant. They may be distinguished thus:

## G. rubicunda.

Calyx with its tube half as long as the limb, or more.

Petals a uniform purple, with an orange-red eye.

Anthers orange-red, the empty end bright yellow.

Seeds clouded with ash coloured and brown.

## G. vinosa.

Calyx with its tube not more than one-third the length of the limb.

Petals nearly white, with a slight dash of purple.

Anthers deep crimson, the empty end nearly white.

Seeds a uniform dark brown, and much smaller.

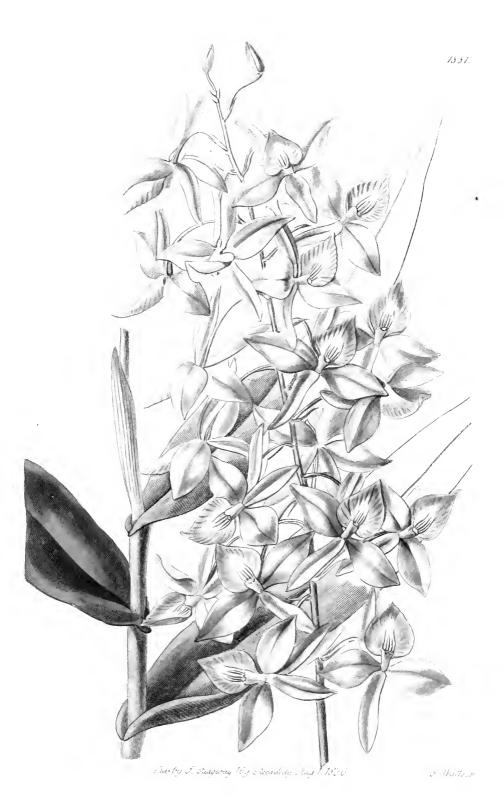
It is a hardy annual, flowering in July and August.

<sup>\*</sup> See folio 1849.

## NOTE.

Mr. Spach has published, in the Nouvelles Annales du Museum, Vol. 4. what he no doubt considers an answer to some of the criticisms that his performances among Onagraceæ have called forth. As a specimen of his style of conducting an argument let the reader take the following. He complains that his genus Boisduvalia is stated by me not to have a fringed chalaza, as if he had said that it had one, and he denies that he ever did state this, (Boisduvaliarum semina fimbriata esse nullibi diximus.) Now it is true that in the character of Boisduvalia this is not mentioned, but on the other hand the main character of the subsection Dermospermæ, in which that genus is stationed, depends upon "semina ad chalazam margine membranaceo aucta." I was not before aware that Mr. Spach did not consider it necessary for his genera (!) to agree in character with the sections under which they are stationed.





## \* EPIDÉNDRUM Skinnéri.

Mr. Skinner's Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Epidendreæ. EPIDENDRUM.—Suprà, vol. 1. fol. 17.

E. Skinneri; foliis distichis lanceolatis acuminatis, caule apice longè aphyllo squamoso, racemo cylindraceo multifloro, floribus cernuis, sepalis linearilanceolatis, petalis ovalibus acutis, labello ovato acuminato integerrimo basi callo sulcato cristato.

E. Skinneri. Bateman's MSS.

Caulis erectus, teres, distichè foliosus, apicè aphyllus vaginatus. Folia 5 poll. longa. Bracteæ lineari-lanceolatæ, pedicellis capillaribus paulò brevioribus. Flores pallidè purpurei, 1½ poll. lati. Labellum cum columná semiconnatum, concavum, basi luteum, cuniculatum.

For this beautiful species of Epidendrum I am obliged to James Bateman, Esq. jun. in whose hot-house at Knypersley it flowered last January. He states, "that it was sent to him in the summer of 1835, from the neighbourhood of Guatemala, by his most excellent friend G. U. Skinner, Esq., to whose enthusiasm in the cause of science he is already indebted for many new and interesting plants. Ep. Skinneri is among the most free-flowering of its tribe; every one of its shoots, both great and small, having been invariably succeeded by a spike of flowers."

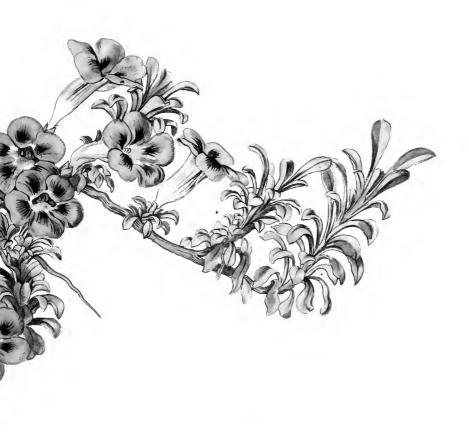
The perfect state of the specimens, so short a time after the importation of the species, attests the skill of Mr. P. N. Don, Mr. Bateman's gardener, in the management of these curious plants.

The species is in the way of E. elongatum, and I presume requires the same management as that plant. I have also received it from Messrs. Loddiges.











in the state of



# \* APTÓSIMUM depréssum.

Depressed Aptosimum.

### DIDYNAMIA ANGIOSPERMIA.

Nat. ord. SCROPHULARIACEÆ.

APTOSIMUM, Burchell.—Calyx campanulatus, semi 5-fidus, basi bibracteatus. Corolla tubo basi contracto, extra calycem amplo, limbo 5-fido, subbilabiato, laciniis rotundatis planis subæqualibus. Stamina didynama, declinata. Antheræ extus villosæ, subbiloculares, loculis confluentibus, rimá unicá transversali dehiscentibus, staminum superiorum minoribus, sæpe cassis. Stylus simplex, stigmate brevissime bilobo. Capsula brevis, basi subglobosa, apice compressa, obcordata, dissepimento contrario, apice breviter loculicidé et septicidé dehiscens.—Suffrutices rigidi sæpius prostrati, vel densissime cæspitosi. Flores axillares sessiles. Bentham MSS.

A. depressum (Burch. Trav. 1. 260.) ramis glabris vel breviter lanuginosis, foliis confertissimis petiolatis obovatis glabris corolla multo brevioribus, calycibus extus glabriusculis intus lanatis capsulas emarginatas vix superantibus. Bentham MSS.

Ruellia depressa. Thunb.?

Ohlendorffia procumbens. Lehm. Index Sem. pl. Eckl.

Caulis fruticosus, terræ appressus, in supina parte densissime ramulosus, ac foliis spathulatis, petiolatis, maxime confertis tectus. Folia 3-4 lineas longa, haud opposita sed spirata, crassiuscula, obtusissima, brevi-mucronata, glabra. Calyces in inferiori parte ramulorum, brevi-pedicellati, axillares, longitudine foliorum, chartacei, pallidi, ad \( \frac{1}{2} \) bifidi, extus læves, glabri, nitidi, laciniis acuminatis patentibus intus dense albo tomentosis. Bracteolæ duæ, breves, lineares, pubescentes ad basin calycis. Corolla 8 lineas longa, extus pubescens, carulea, tuho brevi angusto, limbo infundibuliformi brevi spatio quinquefido, laciniis æqualibus patentibus brevibus. Stamina inclusa; filamenta glabra; antheræ ante dehiscontiam cordatæ,

<sup>\*</sup> From  $\alpha$  privative; and  $\pi\tau\omega\sigma\iota\mu\sigma\varsigma$  decidence, because of the capsules which remain on the stem long after the seeds have fallen out.—Burchell.

subrotundæ, dein transversæ, subrotundo-ovales, transversim pauloque inferius dehiscentes, labio superiori recto verticali, inferiori undulato quadrilobo ciliato. Vertex lanugine alba cinctus. Staminum breviorum antheræ conformes et dimidio duplove minores. Stylus longitudine staminum, glaber, apice incurvus. Stigma verticaliter bilobum. Capsula calyce lunc compresso rigiduloque transversa, apice truncata et subretusa, longitudinaliter rugoso-venosa, inferius crassior rigidiorque, nigrescens. Semina inferiori parte receptaculi conferta, subtrigona, obtusa, punctato-aspera nigra. Funiculus in strophiolam brevem cyathiformam trilobam abit. Albumen tenue, carnosum. Embryo axilis, rectus; radicula subcylindrica; cotyledonibus ovatis.—Vix dubium est, quin Thunbergius şub Ruelliæ depressæ nomine hanc speciem intellexerit, scil. calycibus solis nec corollis repertis nec multum, uti sæpe illi accidit, inquirens, flores minutos dixit in descriptione, Linnæus corollæ non meminit.—Lehm. in litt.

A native of the Cape of Good Hope, whence its seeds were brought to Europe by Mr. Ecklon, the celebrated botanical collector, and communicated to Dr. Lehmann of Hamburgh, under whose care it was raised. To that gentleman I am indebted for the accompanying drawing and description. It is altogether contrary to my practice to publish accounts of plants that have hitherto only been in foreign gardens; but the beauty of this species, the evident fidelity of the drawing, the specimen that accompanied it, and the vicinity of Hamburgh to our own shores, have induced me to deviate from the rule; without however intending that this should be at all drawn into a precedent.

The species is a greenhouse undershrub; it was found by Ecklon in the Karroo, near Hermanskraal, on the Great Fish River, flowering from October to December: Burchell met with it on the Roggeveld; and Drége on the Sneeuw and Rhinoster mountains and Zwartruggers. To Mr. Bentham I am indebted for the following observations upon the genus and some of its affinities.

The genus Aptosimum was considered by Mr. Burchell as allied to Capraria, that is, to the Cape species now forming the genus Freylinia; but the declinate stamina and the conformation of the anthers are very different from that of

any Gratioleæ, and as well as the form of the corolla, appear to me to assimilate the plant much more to some of the Salpiglossideæ, and especially to the Salpiglossis prostrata, Hook, et Arn, and some other species from the West Coast of America, which probably form a new genus. Like other Salpiglossideæ it comes near the capsular Solaneæ, and the corolla is very nearly that of Fabiana.

The following are the characters of the species I am acquainted with of Aptosimum, and of another genus also from the Cape, which is closely allied to it and belongs likewise to the tribe of Salpiglossideæ.

#### APTOSIMUM.

- \* Folia petiolata, detrita non spinosa. Calycis laciniæ intus tomentosæ.
- A. eriocephalum (E. Meyer.) ramis prostratis longe lanatis, foliis longe petiolatis ovatis glabris, calycibus lanatis laciniis intus pubescentibus, capsulis vix emarginatis. On the Gariep, *Drège*.
  - 2. A. depressum (Burch. suprà).
- 3. A. indivisum (Burch. Trav. 1. 219.) ramis brevissimis, foliis dense cæspitosis oblongo-spathulatis glabris corollas æquantibus, ealycis laeiniis intus lanatis.—Carroo desert, Drège. Cape Flats, Ecklon.

Ohlendorffia rosulata. Nees ab Esenbeek.

- \*\* Folia subsessilia nervo medio valido persistente apicè demum spinescente- Calycis laciniæ intus glabræ.
- 4. A. viscosum herbaceum? foliis late oblongo-spathulatis viscoso-pubescentibus nervo medio infra apieem spinescente flores ter superantibus. Rocks near the Gariep, *Drège*.
- 5. A. tragacanthoides (E. Meyer) suffruticosum, foliis anguste oblongis spathulatis glabris flores vix superantibus nervo medio infra apicem spinescente. Rocks on the Kunkunnuroab, *Drège*.
- 6. A. abietinum (Burch. Trav. 1. 308.) suffrutieosum, foliis linearibus glabris flore brevioribus nervo medio excurrente spinoso. On the Sunday River and in the vallies of the Kooper hills, Dr ege.  $\beta$ . elongata on the Gariep.

#### PELIOSTOMUM.

Calyx 5 partitus. Corolla et genitalia Aptosimi. Capsula ovato-oblonga acuta apice subcompressa sulcata valvulis loculicide dehiscentibus septicide bifidis bipartitisve. Semina numerosa minuta.—Herbæ suffruticesve rigidæ sæpe viscosæ. Folia omnia alterna integerrina. Flores axillares vel racemosi breviter pedicellati vel sessiles pedicellis sæpe bracteatis. Corollæ forma fere Fabianæ.

- 1. P. scoparium (E. Mey.) herbaceum rigidum ramosissimum viscosum, foliis parvis paucis oblongo-linearibus, laciniis calycinis oblongis viscoso-villosis capsulam æquantibus, corollæ tubi parte attenuata calyce breviore. Rocks on the Gariep, Drège.
- 2. P. leucorrhizum (E. Mey.) herbaceum rigidum ramosissimum glabrum, foliis oblongo-lanceolatis linearibusve, laciniis calycinis apice subulatis capsula brevioribus, corollæ tubi parte attenuata calyce subduplo longiore. On the Gariep, Drège.
- 3. P. viscosum (E. Mey.) herbaceum rigidum divaricato-ramosum viscoso-pubescens, foliis obovatis oblongisve, laciniis calycinis linearibus obtusis capsula dimidio brevioribus, corollæ tubi parte attenuata calyce subduplo longiore. Rocks on the Gariep, Drège.
- 4. P. virgatum (E. Mey.) suffruticosum ramis rigidis virgatis viscosis, foliis inferioribus obovatis superioribus sessilibus parvis subrotundis omnibus subcarnosis leviter viscosis, laciniis calycinis obovatis oblongisve capsula dimidio brevioribus, corollæ tubi parte attenuata calyce parum longiore. Namaqua country. Ecklon, Drège.
- 5. P. origanoides (E. Mey.) suffruticosum glabrum, ramis brevibus tortuoso-prostratis, foliis, ovatis obovatisve, calycis laciniis linearibus acutiusculis capsula obtusa vix brevioribus, corollæ tubi parte attenuata vix exserta. Nieuweweld and Sneeuwbergen, *Drège*.





## \* TRIFÓLIUM fucátum.

Farded Clover.

### DIADELPHIA DECANDRIA.

Nat. ord. Leguminosæ or Fabaceæ.

TRIFOLIUM.—Suprà, vol. 13. fol. 1070.

T. fucatum; foliolis subrotundis spinoso-denticulatis crassiusculis, stipulis maximis membranaceis integerrimis cuspidatis, pedunculis foliis æqualibus longioribusque, capitulis hemisphericis involucratis, foliolis involucri basi connatis ovato-lanceolatis acuminatis margine membranaceis floribus brevioribus.

Radix annua. Caules suberecti, parum ramosi, rubescentes, internodiis sæpè in spontaneo stipulis tantum æqualibus. Petioli stipulis nunc duplò quadruplò longiores. Stipulæ magnæ, membranaceæ, sæpe rotundatæ et cuspidatæ, nunc acuminatæ. Capitula 1-2 uncias latu, depressa. Involuci foliola herbacea, margine pallidiora, cyathum formantia floribus breviorem. Flores disci ochroleuci, radii rubescentes. Calyx minimus, membranaceus, campanulatus, dentibus quinque aristatis. Vexillum circa carinam et alas convolutum, emarginatum, demum inflatum. Ovarium stipitatum, 7-8-spermum.

A pretty annual clover, the seeds of which were collected for the Horticultural Society in California, by Mr. Douglas. It flowered for the first time in June, 1835, but ripened no seeds, and was afterwards lost. From the wild specimens in my herbarium, it appears to grow in a black peaty soil, probably the damp vegetable matter found in woods.

This new species belongs to the curious set of clovers whose bracts collect into an involucre like those of an umbelliferous plant; among them it is by far the most showy, with its cream-coloured flowers just blushing where the sun strikes them.

<sup>\*</sup> See folio 1408.







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# \* CRATÆGUS tanacetifólia.

Tansy-leaved Hawthorn.

#### ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. tanacetifolia; foliis pinnatifidis glanduloso-serratis pubescentibus basi cuneatis laciniis linearibus, bracteis foliaceis glandulosis pectinatis sub fructu persistentibus, fructibus solitariis sessilibus depresso-sphæricis pubescentibus, putamine crassissimo.

C. tanacetifolia. Pers. synops. 2, 38. De Cand. Prodr. 2, 629. Loudon Arbor. Britann. t. 117, b.

Mespilus tanacetifolia. Smith Exot. Bot. t. 85.

M. orientalis, tanaceti folio villoso, magno fructu pentagono e viridi flavescente. Tourn. coroll. 44. Voyage v. 2. 171. t. 172.

Folia pubescentia, virescentia, parum canescentia, dentibus argutis apice glanduligeris, nunquam calva; stipulis semi-sagittatis serratis. Flores corymbosi subsessiles. Fructus solitarii, sessiles, lutei, depressi, sub-pentagoni, bracteis quibusdam foliaceis glanduloso-pectinatis persistentibus suffulti, pyrenis 5 osseis, putamine crassissimo.

This is obviously known from *Cr. odoratissima* and *orientalis* both by its yellow solitary sessile fruit, to which a small number of leafy bracts adhere irregularly, but also by its regularly pinnatifid leaves, the fine toothings of which are all tipped with a gland. Like those species this is hardy and very handsome; it is multiplied by grafting on the common hedge Hawthorn.

Sir James Smith has the following observations upon it in Rees's Cyclopædia. "Native of all the higher mountains of Greece. A very desirable shrub for plantations, on ac-

<sup>\*</sup> Sec fol. 1161.

count of its highly-scented corymbose flowers, and yellow fruit, which resembles a small apple, and has the scent of one. By culture and grafting, it promises to become an acquisition to our tables. From the description in Dioscorides of his  $\mu\epsilon\sigma\pi\iota\lambda o\nu$ , 'a spinous tree, with leaves like hawthorn, fruit like a little apple, sweet, with three hard seeds,' this should seem, as the number of seeds varies, to be the very plant; while his  $\mu\epsilon\sigma\pi\iota\lambda o\nu$   $\epsilon\tau\epsilon\rho o\nu$ , from Italy, 'a tree like an apple tree, but with smaller leaves, and a round eatable fruit, with a broad depression, slightly astringent, and long in ripening,' can only be our common garden Mespilus germanica. Tournefort did not observe the thorns of the Cr. tanacetifolia, but he describes the eagerness with which his Armenian companions collected and ate the fruit, and he mentions the trees as of the size of oaks."





Sale for & Same one I become

## \* CRATÆGUS odoratíssima.

Sweetest-scented Hawthorn.

#### ICOSANDRIA DI-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

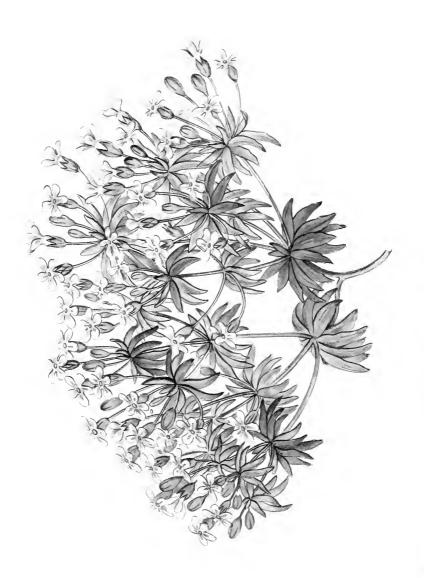
- C. odoratissima; foliis trifidis pinnatifidisque inciso-serratis basi cuneatis incano-tomentosis, fructibus 5-pyrenis sphæricis pubescentibus, putamine
- C. orientalis. Bieberst. Fl. Taur. cauc. 1.387.
- C. odoratissima. Bot. Repos. t. 590. Loudon Arboret. Brit. t. 117 a. C. tanacetifolia  $\beta$  taurica. De Cand. Prodr. 2. 629.

Folia incano-tomentosa, demum viridiora, nunquam calva; stipulis falcatis integris. Pedunculi tomentosi. Fructus lateritii, pubescentes, subpentagoni, pyrenis 5 osseis, putamine crassitudine solità.

A common bush on the hills adjoining the Black Sea, and elsewhere in the Crimea. It is described by Bieberstein as growing to the size of the common Hawthorn.

In this country it is always grafted upon that species, and acquires a dense round-headed habit, which diminishes its beauty in some degree; this is, however, abundantly compensated by its multitude of deliciously perfumed flowers, and the rich clusters of red fruit with which it is loaded in the autumn. It differs from C. orientalis not alone in the colour of its fruit; but in its leaves never becoming smooth, in its stipules being small and undivided, and in the stones that enclose the seeds not being particularly thick-sided.





## \* DOUGLÁSIA nivális.

## Snow Douglasia.

#### PENTANDRIA MONOGYNIA.

Nat. ord. Primulacea.

DOUGLASIA, Lindl.—Calyx obeonicus, angulatus, 5-dentatus. Corolla infundibularis, tubo ventricoso, limbo plano 5-partito, fauce callo lineari sub utroque sinu. Ovarium uniloculare, placentâ centrali liberâ pedicellatâ fungilliformi, margine 5-dentatâ; ovula 5, dentibus placentæ opposita. Capsula vestita, unilocularis, 5-valvis. Semina 2, concava. scrobiculata. Cæspites suffruticulosi (Americæ borealis), foliis indivisis, floribus subumbellatis, solitariisque.

D. nivalis (Lindl. in Brande's Journal, Jan. 1828, p. 383.) foliis linearibus pube rigidâ ramosâ incanis subverticillatis, floribus longè pedunculatis sub-umbellatis.

"Upon his journey across the rocky mountains in April, 1827, in latitude 52° N., longitude 118° W., at an estimated elevation of 12,000 feet above the level of the sea, the attention of Mr. Donglas was attracted by a brilliant purple patch amidst the surrounding snow. On approaching it, he was surprized to find that the colour which had arrested his eve was caused by the blossoms of a little plant, from which the superincumbent snow had not yet melted away. The well-known Saxifraga oppositifolia immediately occurred to his recollection, and he at first imagined he had either discovered that species, or one nearly allied to it; but upon a closer inspection, he perceived that it was no Saxifraga, but a genus apparently new. Specimens having been submitted to me for examination since Mr. Douglas's return, the following description has been drawn up:-The plant forms a thick tuft, consisting of numerous perennial branched stems, the lower of which are covered with the persistent decaved leaves and fruit of previous summers. The stems are round, bright purplish brown, covered with scattered, rigid, branched short hairs, and densely clothed with opposite spreading leaves. The leaves are a dull glaucous green, semi-amplexicaul, linear, obtuse, about five lines long and

<sup>\*</sup> Named by me some years ago in compliment to Mr. Douglas, whose zeal in the collection of seeds and dried specimens of plants, and whose untimely end, have richly earned for him a niche in the long gallery of departed science.

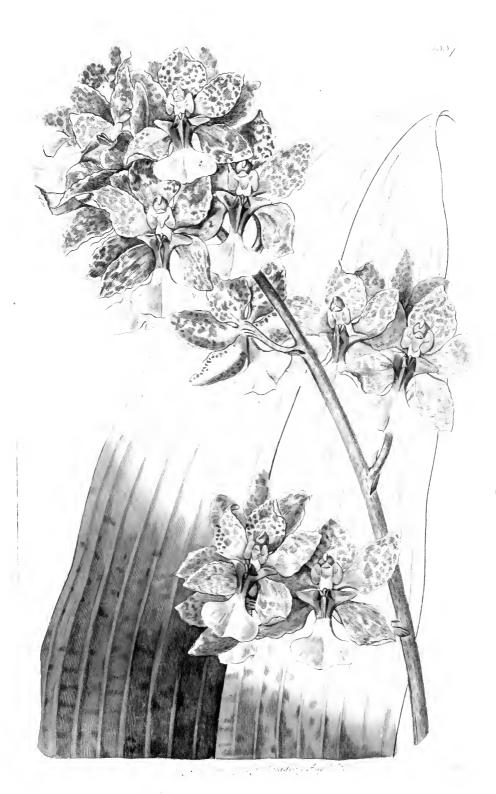
three-quarters of a line broad, so closely covered with hairs, like those of the stem, that the whole epidermis is hidden. Their veins are concealed by the hairs; but if the latter are removed, they appear to consist of a thickened midrib, and a few nearly simple spreading venæ primariæ. The flowers proceed from the axils of the upper leaves, from three to six on each little branch; at first they are sessile, but their footstalks subsequently lengthen by degrees until the fruit is ripe, when they are from three-quarters of an inch to one inch in length, and covered with the same sort of hairs as the leaves and stem. The calyx is hairy in like. manner, obconical, angular, with five equal erect narrowly triangular teeth, about the length of the tube. The corolla is of a vivid purple colour, infundibuliform, wholly destitute of pubescence. The tube is a little ventricose, and rather longer than the calyx, its whole length being about three lines. The limb is spreading, five-parted with cuneate, oblong, obtuse segments; the orifice is guarded by five transversely linear calli, placed under each sinus, and corresponding to the same number of external depressions of the neck of the tube. The anthers are linear oblong, nearly sessile, opposite the segments of the corolla, and a little inclosed within the tube. The ovarium is superior, of an obovate figure, onecelled, with a central free fungilliform placenta, the lower edge of which has five teeth corresponding to an equal number of peltate ovules. The style is filiform, as long as the tube of the corolla, and continuous with the ovarium; stigma, a minute depressed cup. The capsule is of a cartilaginous texture, surrounded by the persistent calvx, one-celled, with five recurving valves; the seeds are two, peltate, oblong, convex on the outside, concave in the inside, dark brown, covered closely with minute dots or depressions; four only having been found, their internal organization has not been determined.

"Hence it appears that, with the exception of the interior of the seed, the whole structure of the plant is determinable: it is also obvious that it is referable to Primulaceæ, of which it possesses all the characters. In fact it is closely akin both to Primula and Androsace. From both these genera, however its ovarium which exhibits the greatest instance of reduction of ovules yet known in the order, and its dispermous capsule, with oblong concave seeds, readily and essentially distinguish it."

The foregoing statement is extracted from the notice of this genus which I published some years ago in the Journal of the Royal Institution. Since that time the plant has been raised in the garden of the Horticultural Society, where it flowered in July, 1835, and subsequently in April, 1836, having been raised from seeds collected in California by Mr. Douglas. It proves to be a branched herbaceous plant, growing pretty freely in peat and sand, and ripening its seed in small quantity. Hitherto it has been kept in the greenhouse, there having been only two plants raised in the first instance; it is however probable that it will thrive better under the treatment suited to alpine plants.

Sir William Hooker possesses a second species (Douglasia arctica, *Hooker*) collected by Dr. Richardson on the shores of the Arctic sea.





## \* ONCÍDIUM Lanceánum.

Mr. Lance's Oncidium.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ. § Vandeæ. ONCIDIUM.—Suprà, vol. 13. fol. 1050.

A. Labellum trilobum.

§ 1. Folia plana, v. complicata. \* Labelli laciniæ laterales nanæ v. obliteratæ. a. Sepula lateralia libera.

O. Lanceanum; ebulbe, foliis oblongis acutis planis substriatis carnosis, scapo racemoso composito erecto rigido racemulis confertifloris, sepalis petalisque conformibus oblongis obtusis carnosis concavis margine undulatis, labelli lobo medio dilatato subcuneato integerrimo basi hastato: lobis lateralibus semi-ovatis, cristà trilobà carnosà jugoque elevato proclivi, eolumnæ alis carnosis rotundatis, antherà cristatà.

O. Lanceanum. Lindley in Hort. Trans. n. ser. vol. 2. p. 100. tab. 7.

This remarkable plant has lately been published in the Transactions of the Horticultural Society of London, whence the following account of it is extracted :-

"In the year 1834, John Henry Lance, Esq. upon his return to England from Surinam, where he had been residing several years, brought with him a considerable collection of Orchideous Epiphytes, which he presented to the Society. Among other interesting species was the subject of the following memorandum; a plant, than which a more acceptable addition to the hot-houses of

this country has rarely been made.

"The genus Oncidium already includes several very beautiful species, in particular O. flexuosum, bifolium, ampliatum and crispum, but all these have flowers in which yellow or brown are the only colours, they owe their beauty to the graceful arrangement of their branches, and to the singular form of their petals, rather than to their colour, and moreover their blossoms are destitute of fragrance. When, therefore, it was ascertained that among Mr. Lance's plants there existed an Oncidium, with violet-coloured sweet-scented flowers, great interest was excited, and no pains were spared to ensure its successful cultivation. Many plants were soon distributed by Mr. Lance's orders, one of which blossomed in the hothouse of the Messrs. Loddiges, and another shortly after in that of the Society. The plant was found by no means difficult to manage; and in point of beauty and fragrance it more than answered all the expectations that had been entertained of

"The roots are flexuose, slender, simple elongations of the base of the stem, evidently intended to grow upon places where the quantity of mould is insufficient to cover them; they lengthen independently of their growth at the point, like the aerial roots of other Epiphytal Orchideæ, and differ from those of other Oncidiums only in being of a greenish yellow colour. The leaves spread from a very short, woody, annulated root-stock, and are about a foot in length on the average; they are of a broadly oblong figure, of a leathery consistence, are nearly flat, a little curved back at the point, and have a light green colour faintly mottled with purple. The flowers are disposed in a short-branched rigid paniele, elevated on a stalk not quite so long as the longest leaves; it is about six or nine inches long, and densely covered with flowers, which sometimes assume a corymbose, sometimes a racemose arrangement. The flowers when expanded measure an inch and three-quarters from the tip of their back sepal to the point of their lip; they emit a delicious fragrance resembling that of the garden pink. The sepals are oblong, concave, obtuse, a little waved and greenish yellow at the edge, bright yellow in the middle, and regularly marked with broad blotches of crimson which run together near the base. The two petals are similar to the sepals. The lip is bright violet, darkest at the lower half; at the base it is prolonged on each side into a triangular tooth, and in the middle of the base there are three nearly equal tubercles which towards the column terminate a ridge that gradually lowers and then disappears at the expanded portion of the lip; above the base it is narrow, it then expands again into a broad, thin, light purple, somewhat truncated and toothed extremity. The column has an oblique, rounded, ear-like appendage on each side, and is capped by a rich crimson anther.

"Such was the specimen from which the annexed drawing was taken; but it was far inferior to one which I have just seen (June 29, 1836), in the rich collection of epiphytes belonging to the Messrs. Rollinsons of Tooting. This plant, which I regard as the most perfect instance of successful cultivation I have yet witnessed among epiphytes, had leaves eighteen inches long, and upwards of thirty flowers two inches and a quarter in expansion, with all the markings of the sepals and petals of the richest chocolate brown, and of the lip of the deepest violet. In fragrance there was a resemblance to the spicy odour of

that sweetest of all flowers Aerides cornutum.

"In the Society's garden this plant is cultivated along with other epiphytes in a damp hothouse facing the north; it is planted in a mixture of sandy peat, potsherds, and decayed wood; and under these circumstances it thrives very well.

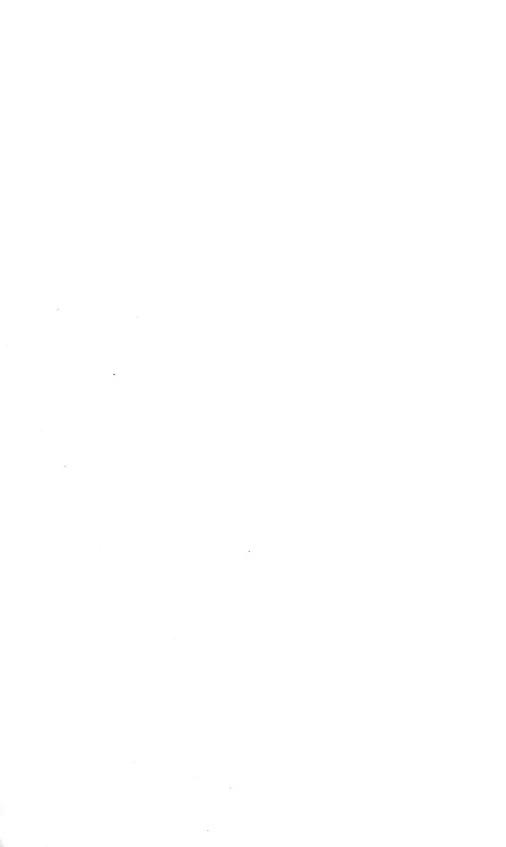
"Mr. Lance has favoured me with the following account of the discovery

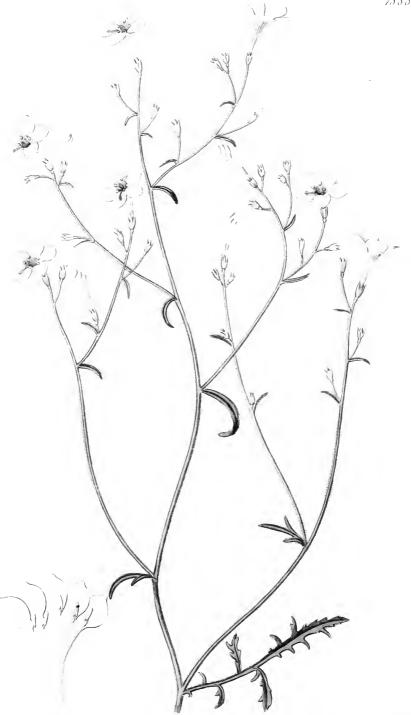
and subsequent management of this remarkable plant in its native country.

"' The first specimen of this splendid Epiphyte I discovered, was growing on the trunk of a large tamarind tree, in a noble avenue of those trees close to the Government House in Surinam. I took it home with me and planted it in a pot filled with rotten pieces of wood and a little light earth; but though it remained alive and flowered once or twice, it did not thrive, but wasted away and became less. I afterwards found a great number of the plants in different parts of the colony; they were generally attached to the stems or branches of the Tamarind, the Sapodilla, or the Calabash trees, appearing to prefer those to any other; however, on being tied to the branches of the Orange, the Soursop, the Mammee, and even the Brugmansia arborea, it grew well upon them all and produced vigorous stems with upwards of twenty blossoms on each stem. The scent is extremely fragrant, and is retained after the flower is dried, only becoming fainter and more of a spicy flavour than when fresh. The plant remains in full beauty ten or twelve days, a long period in that climate, and I found that it always required a shady situation and a living stem to grow upon, without which it would not produce its flowers in the highest perfection.'

"Although the Society's sense of the importance of Mr. Lance's endeavours to introduce new plants to this country has already been recognized by the Council having awarded him the Society's Large Silver Medal, yet I trust it will not be considered improper in me to indicate this in a more specific manner, by naming after that gentleman one of the most beautiful of the plants we owe to

his exertions."





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### \* GÍLIA tenuiflóra.

### Slender-flowered Gilia.

#### PENTANDRIA MONOGYNIA.

Nat. ord. Polemoniaceæ. GILIA,—Suprà, vol. 19. fol. 1622.

G. tenuiflora; caule erecto elato supernè viscoso subnudo paniculato, foliis bipinnatisectis glabris, floribus subsolitariis, corymbis laxis longè pedunculatis, corollis calyce 4-plò longioribus. Bentham supra, vol. 19. 1622. in textu.

Caulis 2-pedalis, totus paululum viscidus, ramis filiformibus sed rigidis subdichotomis, glandulis viridibus fungilliformibus in caule raris sub calyce creberrimis. Flores rosei, nec cærulei. Calyx laciniis mucronatis, dorso herbaceis purpureisve, margine membranaceis. Corolla infundibularis, semunciam longus, extùs roseas, sanguineo acupunctatus, intùs unicolor et violaceus. Autheræ plumbeæ. Capsula ovato-oblonga, testacea, papyracea, semi-trivalvis loculicidò dehiscens; valvulis a placenta 3-angulari demum liberå secedentibus. Semina testacea, oblongo-reniformia, longitudinaliter corrugata, cæterùm glabra.

A hardy annual raised from Californian seeds in the Garden of the Horticultural Society, where it flowered for the first time in August, 1834. A single plant only was at that time raised, but it seeded plentifully, and is now not uncommon.

Mr. Douglas sent it home under the name of Gilia splendens, a somewhat singular appellation, seeing that it is one of the least showy of the genus. In fact it is not worth cultivating for the sake of the flower garden; but it is very pretty in nosegays as an ornament to rooms.

Its flowers change in drying from rose colour to blue, which gave rise to the supposition that they are naturally of

the latter colour. The corolla is in reality of a rich clear uniform violet in the inside, and on the outside of a pale rose, but this colour is much affected by the presence of innumerable short deep red lines, which are as delicate as if they were drawn with the point of a needle.





# \* CIRRHÆA tristis.

Sad-coloured Cirrhæa.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ. CIRRHÆA.—Suprà, vol. 18. fol. 1538.

C. tristis; foliis oblongo-lanceolatis basi parum angustatis, petalis lineari-spathulatis, labelli sagittati lobo intermedio lineari abrupte acuto lateralibus acuminatis parallelis breviore.

Pseudobulbi ovati, sulcati, angulis rotundatis. Folia solitaria, subplicata, coriacca, oblongo-lanceolata vel oblonga, basi in petiolum brevem convolutum angustata. Racemi penduli, foliis paulò longiores, radicales, densè multiflori. Flores odoratissimi tristè purpurei, sanguineo suffusi, apicibus herbaceis. Sepala linearia, patentissima, obtusa, postremo sigmoideo, reflexo. Petala lineari-spatulata sepalis paulò breviora et duplò angustiora. Labellum atropurpureum; ungue arcum continuum cum columná resupinatá efficiente; limbo sagittato, laciniis lateralibus acuminatis subparallelis carnosis intermediá ferè duplò longioribus. Columna arcuata, clavata, truncata, antherà posticá, stigmate obliquo, verticali, cirrhifero, ut in genere.

A deliciously scented species, native of Mexico, whence it was obtained by Messrs. Loddiges, in whose hot-house the drawing was made in June, 1835. The form of its lip is quite different from that of any of the other three species now known.

Like its other botanical allies it grows upon the branches of trees, and apparently in a pendulous manner.

<sup>\*</sup> See folio 1538.







- Maits

# \* CRATÆGUS spathuláta.

Spathula-leaved Thorn.

ICOSANDRIA MONO-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. spathulata; ramulis spinescentibus fasciculatim foliosis, foliis obovatis basi angustatis subtrilobis stipulisque semihastatis foliaceis glanduloso-serratis, floribus subsessilibus, corymbis paucifloris, sepalis incisis.

C. spathulata; ramulis spinescentibus fasciculatim foliosis, foliis parvis longissimè deorsum angustatis subspatulatis trifidis, corymbis paucifloris, pedicellis brevibus, calycibus tomentosis. Mich. Fl. Amer. Bor. 1. 288. Pursh Fl. Am. sept. 1. 336. Non Elliotti.

C. virginica. Loddiges. Loudon Arboret. & Fruticet. Britann. p. 842. t. 560. C. viridis. Hort.

There can be no doubt that this plant, the Cratægus virginica of the Nurseries, is the real C. spathulata of Michaux, about which so little is known that it is altogether omitted from the Floras of Torrey, Hooker, and Beck, is introduced by name into Elliott's work on South Carolina without that author's being acquainted with the plant, was missed by Willdenow, and was unknown to De Candolle. Pursh merely repeats Michaux's character, but he adds that it occurs in dry woods near rivers in Virginia and Carolina, flowering in May and June, and having very large crooked thorns with small leaves. Mr. Loudon in his Arboretum Britannicum† keeps the garden name virginica, considering

<sup>\*</sup> Sce folio 1161.

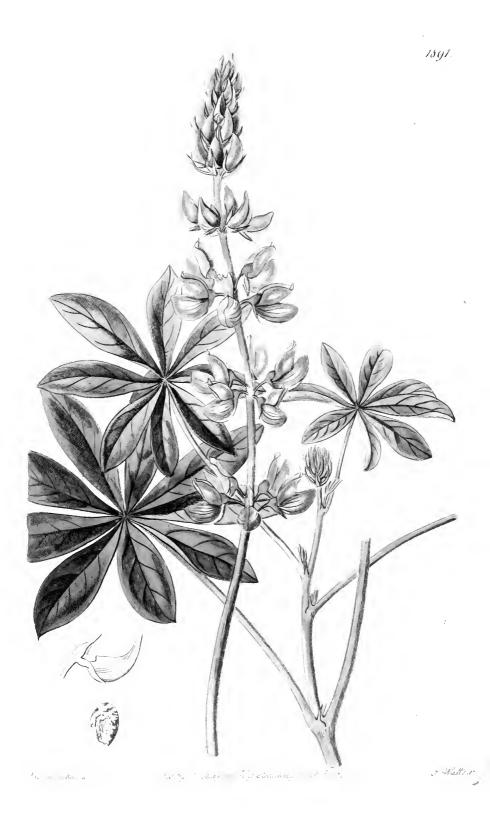
<sup>+</sup> I gladly avail myself of the present opportunity of calling attention to this useful work, upon the hardy Trees and Shrubs cultivated in Great Britain, in which, as is usual in the writings of the indefatigable author, there is a most valuable mass of information, partly compiled, but also to a great extent original.

C. microcarpa figured at folio 1846 of this work, as the true C. spathulata.

A hardy bush, growing four or five feet high, and retaining its leaves late in the autumn.

This species has very much the appearance of *Cr. parvifolia*, from which it is essentially distinguished by its leaves being edged with strong dark glands, and by its large leafy stipules. The fruit is always green, even when ripe, is a little downy, and contains from five to six stones.





### \* LUPÍNUS latifólius.

Broad-leaved Lupine.

#### DIADELPHIA DECANDRIA.

Nat. ord. Fabaceæ or Leguminosæ, § Papilionaceæ. LUPINUS.—Suprà, vol. 13. fol. 1096.

L. latifolius; elatus, caule lævissimo glaberrimo nitente, foliolis 5-7 (5-9) obovatis basi angustatis supra glaberrimis subtus sparsissimè piliferis, stipulis setaceis, bracteis corollam superantibus, floribus racemi valdè elongati longè pedunculati sparsis (et verticillatis) calycis ebracteolati sericei labiis subintegris, carina glabra. J. G. Agardh, Synops. gen. Lupini, p. 18.

Caulis subprocumbens ramosus. Foliola sublucida, mucrone molli cuspidata. Flores purpureo-violacei. Legumina brevia, vix unciam longa, obliquè constricta, intùs isthmis nullis sed lanugine sparsa parcaque obducta. Semina nebulosa.

This Lupine has been described by Dr. J. G. Agardh, in the valuable little work above quoted, from a wild specimen communicated by me, and which had been collected in California, by Mr. Douglas. It is apparently distinct from both L. rivularis and L. littoralis, to which however it approaches more nearly than to L. polyphyllus. It is a hardy perennial, flowering in July and the two following months.

In the work above referred to Dr. Agardh has described 76 certain species of this pretty genus, besides adverting to 7 others of which little is known. Of the former 34 are in Mr. Douglas' collections.

<sup>\*</sup> Sce folio 1198.







# \* ARDÍSIA odontophylla.

Tooth-leaved Ardisia.

PENTANDRIA MONOGYNIA.

Nat. ord. Myrsinaceæ.

ARDISIA.—Suprà, vol. 7. fol. 533.

A. odontophylla (Wallich Cat. no. 2279); foliis lanccolato-oblongis utrinque acutis longè petiolatis argutè dentatis puberulis, racemis axillaribus foliis multò brevioribus, pedicellis brevibus alternis ut pedicelli velutinis, lobis calycinis ovato-acutis ciliatis et puberulis, corollæ profundè partitæ lobis ovato-acutis. Alph. De Cand. in Linn. Trans. vol. 17. p. 125. t. 6.

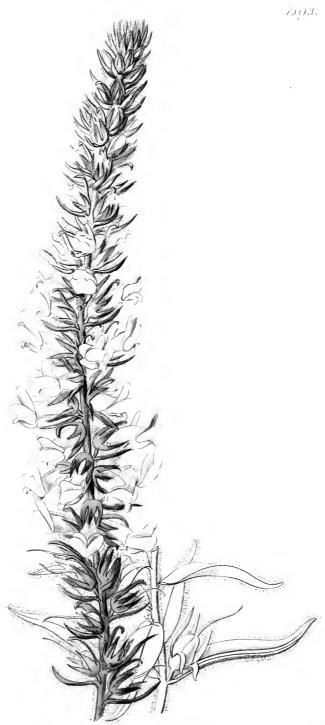
A stove shrub, native of Bengal towards the Sylhet borders and about Gualpara, where it was found by Dr. Buchanan, and by Dr. Wallich's collectors.

It was first introduced by Thomas Carey Palmer, Esq. of Bromley, by whom it was communicated to Mr. Knight of the King's Road, in whose hot-house the accompanying figure was made in July, 1834.

Independently of its being, like all the Ardisias, a handsome evergreen, this species is remarkable for its delicious fragrance. Its flowers are pale salmon colour, slightly streaked with red.

<sup>\*</sup> From  $d\rho \delta u$ , the point of a weapon, in allusion to the sharp-pointed segments of the corolla.





# \* ANTIRRHÍNUM glandulósum.

Glandular Snapdragon.

#### DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophulariaceæ.

ANTIRRHINUM L. Calyx 5-partitus. Corolla personata, tubo crasso vel clongato, basi saccato. Capsula 3 poris valvulatis, v. rarius 2 foraminibus irregularibus sub apice dehiscens. Chavannes Monogr. 74.

A. glandulosum; undique pilis capitatis subviscidis conspersum; foliis alternis petiolatis angustè ovato-lanceolatis, racemo denso folioso, calycis lobis lineari-lanceolatis inæqualibus.

Caulis bipedalis, erectus, ramosus, lætè viridis, glandulis pilorum densissimorum rufescens. Folia subsucculenta, superne lucida, in spontanca parva et ferè linearia. Racemus cylindraceus, terminalis, densissimus, bracteis foliaceis longè ultra flores inferiores projicientibus. Flores solitarii brevi-pedunculati. Sepala lineari-lanceolata, tubo corollæ duplo breviora, inæqualia; dorsali lateralibus longiore. Corolla tubo cylindraceo labioque superiore roseis, labio inferiore ochroleuco, basi anticè gibboso; labii inferioris laciniis æqualibus rotundatis. Stamina tubo æqualia, filamentis basi oblique tortis et dilatatis inferiorum basi barbatis, superiorum pubescentibus; antheris glaberrimis. Capsula immatura subrotundo-ovata, papyracea, pilosa; maturam non vidi.

This, if not a very pretty plant, is something of a geographical curiosity, it being the first species of the genus Antirrhinum which has yet been found certainly wild in the New World; the specimens of A. orontium that have been met with in the United States, are believed to have been introduced from Europe.

<sup>\*</sup> The ἀντφρίνον of Theophrastus and Dioscorides was probably Antirrhinum Orontium. The name, which may be literally rendered Snoutwort, has obviously been derived from the appearance of the corolla, which resembles the snout of some animal.

Seeds of it were sent to the Horticultural Society from California by Mr. Douglas. The flowers were first produced in 1815; they appear in August and September, and continue to open in succession till the frosts come. The species is a quite hardy annual, and will grow in any soil; it ripens its seeds freely enough.

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### 1894

### \* YUCCA Dracónis.

## Dragon-tree-leaved Adam's Needle.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Liliace E.
YUCCA.—Suprà, vol. 20. fol. 1690.

Y. Draconis; arborescens, foliis laxè capitatis subreflexis ensiformibus acuminatis margine scabris, paniculis ramosis, perianthiis patentissimis.

Y. Draconis. Haworth, Suppl. p. 33. Römer & Schult. Syst. veg. 7, 716. Elliott Fl. South Carol. 1, 401.

What may be species and what varieties in this noble genus, it is in the present state of botanical information impossible to say; there is however but little doubt that the two plants which form the subject of this and the succeeding plate are really distinct.

This, which I presume is the Y. Draconis of Haworth and Elliott, at least, whatever it may be of others, is one of the most stately of the genus; it grows along the sea-shore of Carolina, frequently intermixed with Yueca gloriosa, and flowers from May to August; it sometimes grows as much as 9 or 10 feet high. The great peculiarity by which it appears to be distinguished is the spreading flowers, whose segments, instead of remaining closed in a globose manner as in most others, expand till they diverge from the flower-stalk at nearly a right angle.

The drawing was made in the garden of the Horticultural Society, in July, 1835; and about the same time I received it from the Nursery of the Messrs. Backhouse of York, with whom it had been growing in the open ground

<sup>\*</sup> Sce folio 1690.

for some years. Mr. William Wood, who has the charge of the plant department in this extensive establishment, informs me that the main stem, clear of the leaves, was two feet long, and terminated in three clusters of leaves, from the centre of each of which rose a flower stem three feet high. The foliage, notwithstanding its stiffness, does not offend the eye, for the leaves gradually turn back as they grow old, till at last they form the graceful arrangement shewn in the accompanying figure.

Nothing can be better adapted than these plants for ornamenting either artificial or natural masses of rock-work, precipitous banks, or other situations where the singular stems can be so much above the eye, as to form a bold and prominent object standing out in strong relief against the sky. They are hardy, perennial, and easily procured in the Nurseries. The Messrs. Backhouse find this, Y. rufocincta, recurvifolia, glaucescens, filamentosa, and others, quite capable of bearing the winter, even so far north as York. In the Garden of the Horticultural Society no weather seems to harm them.





## 1895

## \* YÚCCA fláccida.

Weak-leaved Adam's Needle.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Liliaceæ. YUCCA.—Suprà, vol. 20. fol. 1690.

Y. flaccida; foliis omnibus valdė flaccidis tenuibus infra medium debiliter recurvo-dependentibus loratim longo-lanceolatis planis apice concavis mucronulatis undique asperiusculis, filis marginalibus validissimis fulvicantibus. Haworth, Suppl. p. 35. Römer et Schultes Syst. Veg. 7. 719.

Acaulis, cæspitosa, foliis flaccidè recurvis, striatis, striarum jugis interrupte elevatis et hinc superficiem scabram reddentibus. Paniculæ multifloræ, patentes, glaberrimæ. Flores ochroleuci rubore vix ullo nisi ipsis apicibus sepalorum, subglobosi. Petala sepalis duplò latiora. Filamenta pruinoso-pubescentia, stylo breviora.

Of this the native country is unknown. It was first noticed in the Garden of Mr. Vere, of Kensington Gore, where it had probably been raised from North American seed. It is a pretty and apparently distinct species, well marked by its thread-edged scabrous leaves, pallid flowers, and stemless habit.

The drawing was made in July, 1835, in the Garden of the Horticultural Society, where the plant is a hardy evergreen perennial; its flowers are over by the middle of August. It is readily multiplied by offsets, and like the rest of the genus thrives most in sandy soil, resembling that of the sea-shore, along which so many of the species are found wild in North America.

These Yuccas would surely be excellent plants for gardens on the sea-coast, and yet one never sees them there.

<sup>\*</sup> See fol. 1690.







# \* MYÁNTHUS deltoídeus.

Triangular lipped Flywort.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

MYANTHUS.—Suprà, vol. 18. fol. 1538.

M. deltoideus; labello imberbi sagittato triangulari, angulis posticis rotundatis dentatis apice dilatato calloso margine recurvo basi tuberculato.

Planta omninò facie M. cernui; foliis quodammodò latioribus. Rachis purpurascens, angulata. Bracteæ parvæ, membranaceæ, acuminulatæ. Petala et Sepala subæqualia, lineari-lanceolata, virescentia, purpureo-maculata et interruptè fasciata. Labellum sepalis duplò brevius, versus basin saccatum, planum, carnosum, atro-purpureum, disco virescente, tuberculo unico oblongo pone basin, et callo virescente ad apicem. Cætera M. cernui.

This makes the fourth species of the present curious genus, and in all probability many more will be added. It is a native of trees in the neighbourhood of the great waterfall of the Demerara river, where it was found by Mr. Joseph Hubbard, who sent it to his friend Mr. Booker of Liverpool, by whom it was presented to Richard Harrison, Esq. of Aighburgh. To the latter gentleman I am indebted for the fine specimen from which the accompanying drawing was made in October, 1835.

Its distinction from the other species resides in its lip, which has none of the fringe-like hairs of M. barbatus and cristatus, but is flat, of a thick fleshy consistence, and of a rich purple colour with a dash of green on its centre; its figure is arrow-headed, with the barbs rounded off and serrated, and the point a little dilated with the edges reflexed.

<sup>\*</sup> Sec folio 1721.

When the third part of the Genera and Species of Orchideous Plants was published in 1833, I was only acquainted with Myanthus cernuus, and cristatus, the latter of which I considered a Catasetum, and the former as the only genuine species of the genus; to a certain degree mistaking the real generic character of Myanthus, in consequence of the imperfect materials of which only I was then in possession. Now however that four species are known in a living state, it has become necessary to alter the original character of the genus so as to include Catasetum cristatum. think is more advisable than to combine Myanthus with Catasetum, as my learned friend Sir William Hooker has recommended (Bot. Mag. fol. 3514). If the latter measure were to be adopted it would be equally necessary to suppress the genera Monachanthus, Mormodes, Cycnoches, &c. the effect of which would be to form a heterogeneous collection of species, the principal combining character of which would reside in the peculiar succulent stems. As the genera now stand they have each a clear distinction, and each already possesses as many species as are usually assembled under newly discovered types of structure; Myanthus has already 4, Cycnoches 2, Monachanthus 2, Catasetum 5; and Mormodes is the only one that comprehends only a solitary species.

Like the rest of its allies a tender stove plant.





# \* CRATÆGUS Arónia.

The Aronia Thorn.

#### ICOSANDRIA MONO-PENTAGYNIA.

Nat. ord. Rosaceæ, Subord. Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. Aronia; subinermis ramulis tomentosis, foliis cuneatis pinnatifidis trifidisque laciniis latis linearibus apice sub-incisis supra lucidis subtus glabriusculis glaucescentibus, corymbis subsessilibus, fructibus (armeniacis) subangulatis dipyrenis, putamine crassissimo.

Mespilus Aronia. Willd. enum. Suppl.

Cr. Aronia. Dec. Prodr. 2, 629. Loudon Arb. Britann. p. 827. fig. 593.
 Mespilus orientalis apii folio subtus hirsuto. Pocock. Travels in the East, 189.
 t. 85. fide Willd.

Arbor mediocris, comà conicá subapertá, ramis rigidis, nullo modo flexuosis. Folia formá variant ut in omnibus ferè speciebus mos est; semper tamen circumscriptionem habent cuneatam; tridentata sunt, trifida, pinnatifidaque, laciniis integerrimis emarginatis incisisque; facie superiore sæpius glabrescunt, subtus pube quádam pagina obducitur. Flores albi speciosi.

Said to be a native of the Levant, I presume upon the authority of Pococke's Travels, which I have not at hand to consult. Specimens from Grammont near Montpellier are before me, and they are considered wild by Professor Delile, who gathered them. This I suspect is the species which yields the fruit called at Montpellier *Pommettes à deux closes*, and not C. Azarolus.

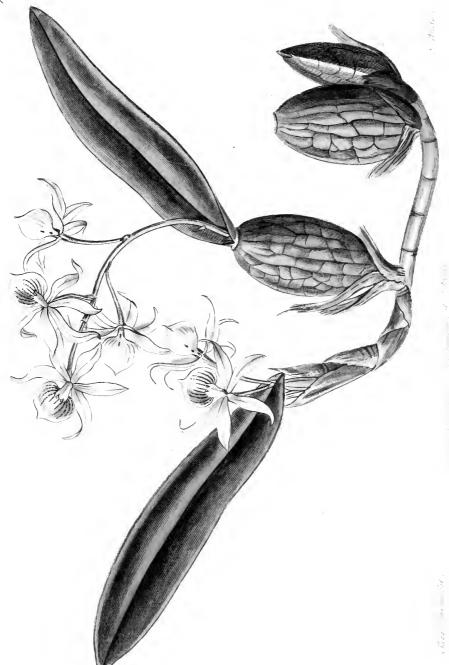
It is very near C. Azarolus, of which indeed it might be considered a mere variety, if it were not so much more hardy, nearly destitute of pubescence, and constantly furnished with

two stones in its fruit; in the true Azarole there are five, according to Scopoli.

The tree of C. Aronia is, next to C. maroccana and heterophylla, the largest and most like timber of all the thorns. It grows very fast, makes a handsome head, and on account of the great quantity of apricot-coloured fruit with which it is loaded, is a suitable ornament for lawns and grass in pleasure grounds.

This plant furnishes a whimsical illustration of the blunders sometimes made by careless compilers. It is supposed to be the plant described and figured in Dr. Pococke's Travels in the East; these are quoted by Willdenow thus, Poch. orient.; De Candolle copying this author prints Pococh. cr., the c in cr being substituted for o by a typographical error; a modern writer copying De Candolle, and knowing nothing about Dr. Pococke, quotes him thus, Pococke Cratægi; thus making that learned Orientalist the author of a monograph on the genus Cratægus!





## 1898

# \* EPIDÉNDRUM émulum.

Emulous Epidendrum.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Epidendreæ. EPIDENDRUM.—Suprà, vol. 1. fol. 17.

### § 1. Foliis in pseudobulbos insidentibus.

E. æmulum; rhizomate repente, pseudobulbis ovalibus compressis, foliis solitariis oblongo-lanceolatis coriaceis, sepalis petalisque lineari-lanceolatis æqualibus patentibus, labello subrotundo mucronato cochleato lineato integerrimo, racemo paucifloro.

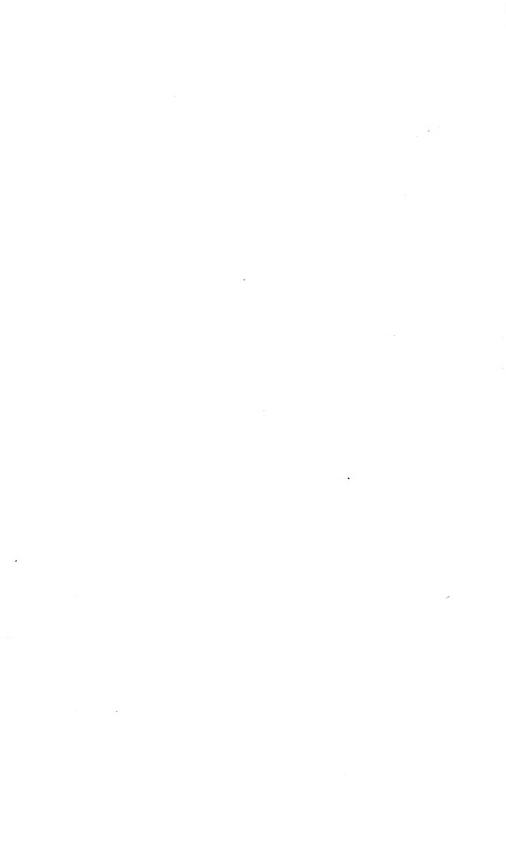
Rhizoma pennam anserinam crassum, repens, apice squamis membranaceis deciduis vestitum. Pseudobulbi 2 poll. longi, glabri, rugosi, oblongi, compressi. Racemus 3-4-florus, folii longitudine. Flores E. fragranti simillimi, sed 3-plò minores; petala non sepalis latiora, et labellum mucronatum nec cuspidatum.

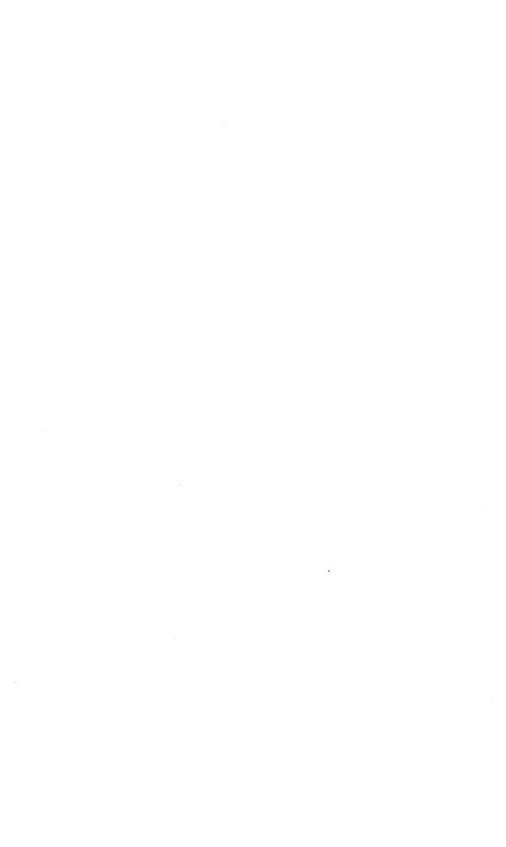
A very rare little plant, closely allied to the variable *E. fragrans*, from which it is distinguished by its pseudobulbs being very exactly oval, and not tapered to each end, by its more leathery less acuminate leaves, and very much smaller flowers, the petals of which are the same width as the sepals.

A native of Para, whence it was sent by Mr. Hesketh, the English Consul, to Richard Harrison, Esq. who favoured me with a specimen in February, 1834.

A tender stove species.

<sup>\*</sup> See folio 1415.







# \* PENTSTÉMON heterophýllum.

Various-leaved Pentstemon.

#### DIDYNAMIA ANGIOSPERMIA.

Nat. ord. Scrophulariaceæ.

PENTSTEMON.—Suprà, vol. 13. fol. 1131.

P. heterophyllum; foliis glaucescentibus integerrimis inferioribus lineari-lanceolatis superioribus linearibus, racemo virgato, sepalis ovatis acuminatis, corollis ventricosis imberbibus, stamine sterili glabro, antheris sagittatis apice fimbriatis.

Caulis  $1\frac{1}{2}$ -2-pedalis, virgatus, glaucescens, basi purpurcus. Folia subcoriacea, obtusa, vix unquam serrulata. Corollæ lætè purpurcæ, glaberrimæ, fere  $1\frac{1}{2}$  unciam longæ, ventricosæ, laciniis labii superioris obliquè rotundatis, inferioris intermediá lateralibus paulo angustiore. Pedicelli supra medium bibracteati. Filamentum sterile album, glaberrimum, subemarginatum.

A native of California, where the seeds were collected by Mr. Douglas. It is a hardy herbaceous plant, propagated by cuttings as well as seeds, and flowering from June to October. The stems are rather woody, and if not supported artificially fall upon the ground, and throw out a number of lateral shoots.

The upper part of the plant is sometimes furnished with leaves so narrow as to be almost linear; the lower has them of an oblong lanceolate form; so that a person unaware of the circumstance would be apt to mistake portions of the same individual for different species.

Drawn in the garden of the Horticultural Society, where the plant grows in common garden soil.

<sup>\*</sup> Sec fol. 1245.







## \* ESCALLONIA illinita.

Varnished Escallonia.

### PENTANDRIA MONOGYNIA.

Nat. ord. Escalloniaceæ.

ESCALLONIA. L.—Calycis tubus hemisphæricus, ovario adnatus, limbus epigynus quinquedentatus. Petala 5, annulo epigyno inserta. Stamina 5, cum petalis inserta, iisdem alterna. Capsula bilocularis, a basi versus apicem septicidè dehiscens. Semina plurima, placentis in utroque loculo geminis, e columella centrali filiformi ortis affixa, scrobiculata. Albumen carnosum, copiosum. Embryo orthotropus, axilis. Pöppig et Endlicher Nov. gen. et sp. 1. 8.

E. illinita; foliis oblongo-lanceolatis serrulatis viscosis vernicosis, corymbis subtrifloris racemosis, disco epigyno hemisphærico.

E. illinita. Presl. Reliq. Hænk. vol. 2. p. 49. t. 59. Hooker et Arnott in Bot. Miscell. 3. 343.

Frutex scmpervirens, dumosus, undique vernice obductus, odorem gravem Meliloti aut Fæni Græci spirans. Rami vernicis acervulis papillosi. Folia pallidè viridia, nunc tantùm lucida, nunc vernicem nitidissimam ex punctis numerosissimis exsudantia. Racemi terminales, corymbis constantes pluribus alternis trifloris bractea parva foliacea suffultis. Flores albidi, subvirescentes. Calyx limbo campanulato truncato, dentibus 5, subulatis. Petala 5, distincta. Stamina 5, petalis alterna et paulò breviora. Discus epigynus flavus, hemisphæricus, arcolis 10 nectariferis subdepressis circa verticem. Ovarium biloculare, polyspermum.

This is by far the most hardy of the many species of Escallonia at present in our gardens, and is not unlikely to become a common evergreen. If this should prove so, the pale green of the leaves, their varnished appearance, and the peculiar habit of the plant, will render it a valuable ornamental species, notwithstanding the want of beauty in its greenish white flowers.

<sup>\*</sup> See folio 1467.

It is a native of the mountains of Chili; the late Dr. Gillies met with it at El Arroyo de los Lunes, and Valle del Rio Tinguirica; and a supposed variety at La Siente Vieja and La Cuesta de Chacabuco; Bridges found the latter at La Laguna, near Valparaiso.

Flowers in August and September; and readily enough multiplied by cuttings. The figure was made in the garden of the Horticultural Society.

The whole plant emits a powerful odour, which to some persons is highly disagreeable, appearing to them to resemble the smell of swine; to me it seems less unpleasant, and much more like the odour of Melilot or Fenugreek.

The most showy plant of this kind is the Escallonia Montevidensis, which is also nearly hardy. That species is usually covered with hundreds of hemispherical heads of clear white flowers, over which countless insects keep up a busy hum, as they spring from blossom to blossom in search of the rich store of honey concealed within the recesses of the calyx-cup. As one looks at these creatures enlivened by the warmth of a bright sunny day, one cannot but admire the exquisite beauty of the ball room that nature thus provides for an insect festival.

The disk of this species does not surround the base of the style in the form of a cup, but adheres to it in the form of a solid yellow cone. I do not know whether such a distinction is of more than specific value.





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## \* SCAPHYGLÓTTIS violácea.

## Violet Boatlip.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ. SCAPHYGLOTTIS. Pöppig et Endlicher Nova Genera et Species Plantarum, 1. 58. Sepala conniventia, lateralia basi paulo producta cum pede columnæ connata labello supposita, supremum lineare convexum. Petala conformia sed paulo breviora. Labellum oblongum canaliculatum cum pede paululum producto columnæ continuum eique in parallelum, margine leviter repandum. Columna marginata. Pollinia 4. teretia, glandulam cuncatam sessilia.— Herbæ epiphytæ, caulescentes, nunc pseudobulbosæ in axillis. Folia coriacea, angusta. Flores parvi, axillares, pedunculis densè vaginatis.

S. violacea; pseudobulbis nullis, foliis linearibus apice emarginatis, floribus subgeminis, labello lineari apiculato leviter repando. Cladobium violaceum. Lindl. Nat. syst. of Botany, p. 446.

Caules teretes, striati, articulati, verosimiliter penduli, ad nodos proliferi. Folia 2-3 poll. longa, linearia v. lineari-lanceolata, emarginata, fortè in pseudobulbos insidentia dum planta vegetior pullulat. Flores minuti, violacei, pedunculis dense vaginatis brevissimis, geminati. Sepala lateralia basi producta et obliqua, supremo lineari duplò latiora. Petala supremo conformia, sed paulo breviora et minùs colorata. Labellum album, cum basi leviter producto columnæ continuum, carnosum, canaliculatum, lineare, apiculatum, apice purpurascens, margine leviter repandum ideoque subtrilobum. Columna semiteres, alba, apice utrinque unidentata. Pollinia 4, distincta, teretia, in glandulam triangularem sessilia.

A native of Demerara, whence it was imported by Messrs. Loddiges. It is not a species of any beauty, but it is a great Botanical rarity, flowering in the Orchideous stove in February.

<sup>\*</sup>  $\Sigma \kappa \hat{a} \phi_{00} = 0$  a boat, and  $\gamma \lambda \hat{\omega}_{770} = 0$  a tongue, in allusion to the usual form of the labellum.

It constitutes, along with some other South American plants with a similar habit, a genus representing among Vandeæ Isochilus in the Epidendreous section; and distinctly characterized by its flowers having the calyx and corolla of Specklinia, combined with pollen masses of a very unusual structure. When four pollen masses are combined in pairs, they are usually pressed so close together that the one is flattened against the other, and they seem as if in reality each pair were produced by the slitting of one; in this genus, on the contrary, each mass is rounded and separate from its neighbours.

When I published this plant in the work above quoted, under the name of Cladobium violaceum, I had not seen the late parts of Pöppig and Endlicher's Nova genera, which appeared in the end of 1835; and consequently I was unaware of the genus having been already named Scaphyglottis in that work. Perhaps as the name Cladobium was in circulation, from me, so long since as February, 1835, I might on that ground set up a claim to priority, and preserve it; but as Mr. Pöppig has described several species, I think the interests of science will be best consulted by cancelling Cladobium and adopting Scaphyglottis.

Of the dissections, 1. is an entire flower seen in profile and magnified; 2. is a side view of the column and lip; 3. a view of the lip from above; 4. a set of pollen masses with their gland.



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ate Sol

# \* CÝTISUS æólicus.

Æolian Cytisus.

### DIADELPHIA DECANDRIA.

Nat. ord. Fabaceæ or Leguminosæ, § Papilionaceæ. CYTISUS.—Suprà, vol. 2. fol. 121.

- Sect. 2. Laburnum, Calyx campanulatus. Legumina polysperma ad suturam superiorem non dilatata.—Flores flavi. Rami inermes foliosi. DC.
- C. æolicus; ramis teretibus foliisque incanis, foliolis ovalibus tomento marginatis, floribus ternis subebracteatis racemosis, calycibus membranaceis campanulatis pubescentibus ½, leguminibus glabris.

C. æolicus. Gussone ined.

Frutex elatus. Rami pilis mollibus patentibus hirsuti. Folia ternata, incana; foliolis angustè ovalibus, subsessilibus, petiolo longioribus, tomento marginatis. Racemi terminales, breves, flexuosi, rachi tomentosâ. Flores lutei, geminati ternatique, pedicellis calyce longioribus, pubescentibus. Calyx campanulatus membranaceus, pubescens, bilabiatus: labio superiore 2-dentato inferiore ovato integerrimo. Vexillum oblongum, obtusum, alis longius marginibus reflexis. Carina basi pubescens, unguibus linearibus angustissimis. Stamina monadelpha, antheris alternis minoribus. Legumina juniora glabra.

From the seed of a plant marked Cytisus acolicus in the garden of Professor Tenore, at Naples, and said to be a new species discovered in Stromboli by Professor Gussone, this plant was raised by the Honourable W. F. Strangways, in his curious garden at Abbotsbury in Dorsetshire. It flowered there this year for the first time in England, and specimens were given me in May of the present year; it is expected that the blossoms will become handsomer and more copious as it grows older.

<sup>\*</sup> See fol. 1191.

The climate of Stromboli does not hold out much prospect of this plant being hardy enough to bear English winters, without some kind of protection; I do not however anticipate any difficulty in preserving it against a wall on a well drained border.

In foliage it bears a striking resemblance to *C. proli-* ferus, but its flowers are altogether different. Its real affinity seems to be with *C. triflorus*, from which it differs in being a much larger and more woody plant, with terminal racemes of flowers, in its larger, deeper and more distinctly campanulate calyx, and smooth, not hairy pods. It seems as if it were an intermediate species between *C. Laburnum* and *C. triflorus*.

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# \* LAPEYRÓUSIA ánceps.

Two-edged Lapeyrousia.

#### TRIANDRIA MONOGYNIA.

Nat. ord. IRIDACEÆ.

LAPEYROUSIA. Pourr.—Perianthium hypocrateriforme; tubo longissimo gracili; limbo sexpartito subregulari. Stamina 3, tubo supernè inserta. Stylus filiformis; stigmata 3, gracilia, bifida, patentia. Capsala membranacca, triangularis. Semina numerosa, triquetra (spherica). Dietrich.

L. anceps; caule folioso ancipiti angulis dentatis, foliis ensiformibus rectis, bracteis cucullatis subcrispis foliosis, laciniis limbi subspathulatis.

Gladiolus anceps. Thunb. dissert. no. 17. t. 2. f. 3.

Gladiolus denticulatus. Lamark illustr. 1. 118.

Ixia Fabricii. De la Roche dissert. p. 18. no. 5.

Ixia Lapeyrousia. Gmelin syst. veg. 108.

Ixia pyramidalis. Lamark Enc. Meth. 2, 334. Illustr. 1, 109.

Lapeyrousia compressa. Pourr. aet. tolos. 3. t. 6.

Lapeyrousia anceps. Ker. Ann. Bot. 1. 238.

Ovieda anceps. Spreng. syst. 1. 147.

Meristostigma anceps. Dietr. Sp. plant. vol. 2. 596.

Flores albi, odoratissimi. Ovarium triloculare, polyspermum, ovulis serie duplici affixis, horizontalibus. Stylus filiformis; stigmata 3, bipartita, filiformia, æqualia. Capsula membranacea, obcordata, triquetra, corrugata, pisi maximi magnitudine; semina sphærica, minutissime papillosa, testà papyracea, raphe tenui simplici, chalazà carnosa depressa. Embryo teres, albus, in axi albuminis cornei.

An uncommon, though long known, Cape plant, having nothing to boast of in point of rich colouring or fantastical structure, but with a pretty modest aspect and a delicate delightful perfume.

It is usually cultivated in a greenhouse, but will thrive perfectly in a cold frame, well drained in winter, and ex-

<sup>\*</sup> Named in compliment to Mons. Picot de la Peyrouse, author of figures of Pyrenean Plants, and a short history of the Pyrenean Flora.

posed to the warm and bright south in summer. It then flowers in June and July, and ripens its seeds about October.

The figure was taken from a plant in the possession of John Rogers, Esq. jun. of Streatham.

Fig. 1. is a view of the vertical section of the ovary; 2. is a transverse section of the same; 3. shews the stigmas and point of the styles.





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## \* IONÓPSIS ténera.

## Delicate Ionopsis.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

IONOPSIS, Kunth. — Perianthium clausum. Sepala lateralia basi approximata, (v. connata) cum basi labelli connata. Petala sepalis conformia. Labellum sepalis multò majus, basi saccatum, ungue bicalloso columnâ parallelo, laminâ explanatâ patente bilobâ. Columna crecta, aptera, semiteres, rostello rostrato. Anthera 1-locularis rostrata. Pollinia 2, postice sulcata, caudiculâ lineari inclusâ, glandulà obovatà. — Herbæ epiphytæ, acautes. Folia coriacea. Scapi paniculati, vaginati. Flores parvi, pallidi. Lindl. Gen. & Sp. Orch. 193.

I. tenera; foliis carinatis acuminatis, scapo subsimplici, sepalis acutis lateralibus liberis labello cuneato obliquè truncato bilobo crenulato duplò brevioribus.

The species of this genus are but little known. It is seldom that they appear in gardens, in consequence of the difficulty attending their preservation on shipboard, and when imported they are difficult to manage and soon are lost. In their native woods they grow upon the smaller branches of trees, or upon dead sticks, which their white slender delicate roots quickly overspread. When cultivated they require all the aid of a hot and damp stove.

Materials to illustrate this genus are so uncommon, that there is much difficulty in ascertaining what species it contains. I think, however, four may be safely characterized, exclusively of I. pulchella and testiculata. The first of these is figured in the Collectanea Botanica, under the name of I. utricularioides; it is a smaller plant in all respects than the other three, has a panicled scape, and its labellum is not much longer than the sepals, which are acute; a second is Sir William Hooker's Iantha pallidiflora, which has a large lip with a little irregular toothing at its margin, and extremely obtuse sepals and petals. The third is that now represented, which differs from I. pallidiflora in its sepals being acute, and its

<sup>\*</sup> Literally Violet-faced;  $\iota o \nu$  a violet and  $o \psi \iota \varsigma$  look; why so named I do not know.

leaves sharp-pointed and carinate, without any intermediate tooth between the lobes of the lip. The fourth is a very remarkable species, with which I am acquainted through an extensive unpublished collection of excellent water-colour drawings, by Mons. Descourtilz, of Brazilian Orchideous plants, obligingly lent me by Baron Delessert. This species has purple panicled scapes a foot and half long, bending gracefully beneath the weight of the delicate snow-white flowers. It was found in the ancient forests of Brazil, in the province of St. Paul. M. Descourtilz mentions a variety of it with flowers of a delicate and pure rose colour. "Son inflorescence," he says, "a lieu dans les mois de Septembre et d'Octobre, et se prolonge jusqu'en Mars sans que les fleurs se fanent; elles sont inodores."

The systematic characters of these species are given below. For the following note, and the drawing of the accompanying plate, I have to thank Mr. Booth, the very intelligent gardener of Sir Charles Lemon, Bart.

- "This elegant little plant flowered in May last, in Sir Charles Lemon's collection at Carclew, to which it was presented by Captain Sutton, of Flushing, near Falmouth, who brought it from Havannah in March, 1835."
- "Pseudo-bulbs, very small and nearly hidden by the leaves, oval, deep green. Leaves oblong-lanceolate, of a brownish green colour, striated, sheathing at the base, thick and fleshy, from 2 to 4 inches long, and about half an inch broad, slightly carinate, and tapering to a narrow point. Scape produced from the bottom of the small pseudo-bulb, and rising from 8 to 10 inches high; jointed, round and slender, nearly erect, of a pale brownish green, bearing a number of delicately marked flowers arranged alternately in a loose sort of panicle. Sepals very small and thin, closely laid over the petals which they resemble in colour, but are rather shorter and more acuminate. Petals oblong, rounded at the edge, concealing the column. Labellum large, and spreading, two-lobed, almost obcordate, with a spur at the base, of a pale pinkish colour, beautifully marked with bright violet-coloured veins, darkest towards the claw, which has two, raised, fleshy, yellow appendages, parallel to, and about twice the length of, the column: the latter is pale green and roundish oblong."

I. utricularioides (Collect. Bot. t. 39. A.) foliis carinatis acuminatis, scapo ramoso, sepalis acutis lateralibus liberis, labello cuneato oblique truncato bilobo integerrimo.——Labellum sepalis dimidio tantum longius. Flores minimi in genere.——Ins. Trinitatis.

I. pallidiflora (Iantha pallidiflora, Hooker Exot. Fl. t. 113.) foliis linearibus obtusis planiusculis, scapo subsimplici, sepalis obtusissimis lateralibus liberis labello cuneato obliquè truncato bilobo cuspidulato crenulato duplò brevioribus.——Ins. Trinitatis.

I. paniculata (Epidendre paniculé, Descourtilz Epidendr. Bras. ined. in bibl. Delessert t. 54.) foliis lineari-lanceolatis carinatis, scapo ramosissimo, sepalis acutis lateralibus ultra medium connatis labello obcordato apiculato plano integerrimo duplò brevioribus.——Flores majores quam in I. tenera, albi. Labellum medio purpureo lineatum, basi flavum. Variat floribus roseis.——In sylvis primævis Brasiliæ, prov. Si. Pauli.



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# \* RONDELÉTIA odoráta.

### Sweet-scented Rondeletia.

#### HEXANDRIA MONOGYNIA.

Nat. ord. Cinchonace.e.

RONDELETIA, Plum.—Calycis tubus subglobosus, limbus 4-5-partitus, lobis oblongis linearibusve acutis persistentibus. Cor. tubo cylindrico vix apice subventricoso, limbo patente 4-5-lobo, lobis subrotundis; anthera 4-5, in apice tubi inclusæ, sessiles. Stigma bifidum. Capsula globosa, calyce coronata, bilocularis, ex apice dehiscens in valvulas 2, sæpiùs apice fissas, undè sæpè 4-valvis videtur, nunc loculicido-rariùs septicido-dehiscens. Placentæ centrales. Semina plurima, minima, ovato-angulata, sæpè 2 tantùm in loculo maturescentia.—Arbusculæ aut frutices omnes ex Americá. Folia plùs minùs petiolata aut subsessilia. Stipulæ deltoideæ aut lanceolato-lineares, utrinquè solitariæ, indivisæ, interdùm intùs hirsutæ. Pedunculi axillares, sæpiùs trichotomi, interdùm in paniculam corymbosam terminalem dispositi, rariùs tri- imo uniflori. DC. prodr. 4. 406.

R. odorata; foliis vix petiolatis ovatis aut subcordatis acutiusculis, suprà sparsè scabris, subtus pallidioribus in nervis tantum scabris, corymbis terminalibus. D. C. 1. c.

R. odorata. Jacq. Amer. t. 42. p. 59. Linn. Sp. 1671.

R. coccinea. Quorundam.

R. speciosa. Hort.

Obs. Os corollæ cyatho brevi integro munitum, characterem dat auctoribus recentioribus prætervisum.

The accompanying drawing was made in the hothouse of Messrs. Loddiges, in December, 1834. The plant more usually flowers three months earlier; it requires to be kept in a stove, and by no means exposed to cold even in the summer.

<sup>\* &</sup>quot;So named by Plumier after Guillaume Rondelet, a physician and naturalist, born in 1507, died in 1566. He is principally known for his works on Algæ and Fishes. Rabelais ridiculed him under the name of Rondibilis. He is accused of having given a horrible proof of his love for anatomy, in dissecting his own son."—De Théis.

Jacquin, who found it in the Havanna, on bush-covered rocks near the sea, and sometimes growing upon the naked rock itself, describes it as an inelegant straggling shrub about six feet high. He says the bright vermilion coloured flowers are as sweet-scented as violets; a property however which exists in only a slight degree in the cultivated plant.

It is usually known in gardens by the erroneous name of Rondeletia speciosa.





### 1906

## \* EPIMÉDIUM macránthum.

## Large-flowered Epimedium.

#### TETRANDRIA MONOGYNIA.

Nat. ord. Berberace.

EPIMEDIUM, L.—Sepula 4, discolora, petalis opposita. Petalu 8, colorata; exteriora simplicia; interiora calcarata. Stamina 4, petalis interioribus opposita. Capsula siliculæformis, polysperma.—Herbæ perennes, foliis radicalibus compositis, foliolis serrato-aristatis.

E. macranthum; foliis triternatis, foliolis cordatis ovatis, petiolis pilosis, racemis multifloris, sepalis linearibus obtusis, petalis ovato-lanceolatis exterioribus quam interiorum calcaria duplò brevioribus.

E. macranthum. Morren & Decaisne Ann. des Sc. ser. II. 2. 352. t. 13.

A very pretty sweet-scented species, remarkable for the large size of its pale violet flowers. It has been amply described by Messrs. Morren and Decaisne, from plants that flowered in the garden of the University of Ghent, where it forms one out of one hundred and sixty species of Japanese plants brought to Europe alive by Dr. von Siebold. This is by far the most considerable importation from Japan that has yet been made, and its results have been so satisfactory as to lead us to hope that the Dutch may be the means of bringing us acquainted with a larger portion of the beautiful plants of that most singular country.

The drawing of this species was made in April last, from a plant in the possession of Mr. Osborne of the Fulham Nursery. It is no doubt quite hardy, and is well worth the

<sup>\*</sup> An old name, supposed to be derived from Media, where the plant to which it belonged was reported to grow; that plant does not however appear to have had any resemblance to the Epimedium of modern writers.

notice of all lovers of pretty and curious plants. Two more species of the same genus, E. violaceum and Musschianum, are in the garden of Ghent.

The Epimedium alpinum is common in Botanical gardens, but its dusky brown flowers are so small as to escape notice; it is reputed to be a wild British plant, but Messrs. Morren and Decaisne are of opinion that it is merely an outcast from gardens, and that it is not really wild north of the Maritime Alps in 44° N. lat.

The dissections at the bottom of the plate represent, fig. 1. one of the innermost petals, or nectaries as they are usually called, with a stamen growing just in the mouth of its cavity; 2. a stamen with the valves of its anthers turning backwards; 3. a pistil; 4. a section of its ovary, shewing how the ovules grow in two rows to an elevated placenta; I do not find them in three rows as described and figured by the learned Botanists above quoted.





# \* ASPÁSIA variegáta.

Variegated Aspasia.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

ASPASIA. Lindl. — Perianthium patens, æquale. Sepala lateralia libera; supremum cum petalis basi et dorso columnæ connatum. Labellum oblongum, concavum, ecalcaratum, obsoletè 4-lobum, cum columna semi-connatum. Columna labello parallela, semiteres, marginata. Anthera bilocularis. Pollinia 2, pyriformia, postieè sulcata, caudiculà planà cuncatà, glandulà parvà. — Herbæ epiphytæ, caulescentes, pseudobulbosæ. Folia subcoriacea. Spicæ radicales, breves.

A. variegata; pseudobulbis oblongis ancipitibus, sepalis lineari-oblongis petalisque subrhomboideis acutis, labelli lobis lateralibus recurvis intermedioque carnosis serratis.

Bracteæ ovatæ, cucullatæ, herbaceæ, coriaceæ. Sepala coriacea, herbacea, sanguineo fasciata. Petala herbacea luteo-marginata sanguineo interruptè striata, cum basi sepali supremi connata ideoque obliquè inserta. Labellum carnosum, serratum, album, violaceo-maculatum, basi limbi bicallosum. Pollinia pyriformia, posticè sulcata caudiculá simplici inserta.

A native of the tropical part of South America. I received specimens of it for the first time from Mr. Joseph Knight of the King's Road, in February, 1836, and subsequently from Mr. Bateman. The flowers are deliciously sweet in the morning. It will probably prove a plant of easy cultivation, and if so it will deserve to be in every collection.

In most respects it is very like A. epidendroides, for which, before I carefully examined it for publication, I had mistaken

<sup>\*</sup> From  $\alpha\sigma\pi\alpha\zeta o\mu\alpha\iota$  I embrace, in allusion to the manner in which the column is embraced by the labellum.

it. There are however some essential differences between them, especially in the form of the labellum, and in the far greater degree of obliquity in the insertion of the back sepal in A. epidendroides; it is moreover probable from the dried specimens of the latter that its flowers are whole coloured; I have subjoined a character by which it may be distinguished.

In the same collection of unpublished drawings, belonging to Baron Delessert, to which I have already referred (fol. 1904), there is a figure of a third species of this genus. It has oblong smooth not two-edged pseudo-bulbs, solitary much larger scentless flowers, of which the sepals and petals are yellowish green blotched with crimson, and the lip and column pure white, with a faint purplish crescent-shaped stain in the middle of the lip. M. Descourtilz found it on the Cedrela in Brazil, in the district of Bananal. A variety of it is mentioned by him with a pale lilac lip, the stain on which is deep violet. He also represents the pollen masses as each furnished with a separate caudicula; if this is correct it will be an additional reason for doubting how far that character is of importance in distinguishing Genera.

Of the dissections in the accompanying plate that in the centre represents a magnified view of the column and the base of the labellum; the other the pollen masses with their caudiele and gland seen from behind.

A. epidendroides (Gen. & Sp. Orch. p. 139); pseudobulbis oblongis ancipitibus, sepalis lineari-oblongis acutis, petalis obtusis concavis, labelli lobis lateralibus rotundatis integerrimis, intermedio crenulato emarginato.——Panama and Columbia occidentalis.

A. lunata; pseudobulbis oblongis compressis lævibus, sepalis petalisque linearibus obtusis patentissimis, labelli lobis lateralibus nanis intermedio plano subquadrato undulato, floribus solitariis.—Brazilia.—Sepala et petala luteoviridia, sanguineo-maculata. Labellum album maculâ lunatâ in medio. Flores inodori.





### 1908

# \* CRASPÉDIA glauca.

## Glaucous Craspedia.

#### SYNGENESIA POLYGAMIA ÆQUALIS.

Nat. ord. Compositæ Corymbiferæ, or Asteraceæ.

CRASPEDIA, Forst.—Capitulum circiter 5-florum. Rachis bracteolata. Pappus uniserialis, plumosus.——Herba glabrata, Australasica, erecta, simplicissima, monocephala, foliis oblongo-obovatis, foliolis integris scariosis. Lessing Gen. Compos. 271.

Craspedia glauca. Spreng. syst. 3. 441. Richea glauca. Labillard. Fl. Nov. Holl.

Herba perennis, glaucescens, pilis quibusdam sparsis, teláque rará araneosá vestita. Folia lineari-lanceolata, acuminata, subdecurrentia. Caulis in planta culta foliosus, in spontanea subaphyllus; semper monocephalus. Capitulum compositum, sphæricum, foliolis ovatis acutis involucratum; partialia 5-9-flora, pariter involucrata, sed foliolis interioribus involucelli membranaceis scariosis. Receptaculum planiusculum, squamis serratis membranaceis corollis brevioribus munitum. Pappus basi annularis, in setis sedecim plumosis divisus corollæ longitudine. Corolla infundibularis, lutea. Antheræ caudatæ. Stylus basi bulbosus, brachiis truncatis canaliculatis, apice pulvinatim dilatatis.

A curious herbaceous plant, found in Van Diemen's Land, whence it was sent by Mr. James Backhouse to his brother, in whose Nursery at York it flowered in April last.

It will no doubt be hardy in the warmer parts of Great Britain, but had better be kept in a frame in other places.

The ample dissections in the accompanying plate give a correct idea of its structure. Each of the round yellow heads is composed of several smaller heads; and the involucre consists principally of the external leaflets of the small

<sup>\*</sup> Said to be so called from  $\kappa\rho\alpha\sigma\pi\epsilon\hat{c}\sigma\nu$  a fringe, in allusion, I presume, to the feathery pappus.

heads. Each smaller head (fig. 1.) consists of from 5 to 9 florets, surrounded by ovate rather serrated leaflets, all of which, except the most exterior one, are white and membranous. The florets (fig. 2.) arise from the axil of each leaflet, and have a feathery pappus (fig. 4.) cup-shaped at its base, and then divided into 16 rays. The corolla (fig. 5.) has rather a funnel-shaped figure; the anthers have each two bristles at the base (fig. 3.); and the style, which is bulbous at the base is divided at the apex into two linear furrowed arms, each of which is terminated by a cushion-shaped dilatation.





# \* CLINTÓNIA pulchélla.

Pretty Clintonia.

SYNGENESIA MONOGAMIA.

Nat. ord. Lobeliaceæ. CLINTONIA.—Suprà, vol. 15. fol. 1241.

C. pulchella; foliis sepalisque obtusis, corollæ laciniis superioribus ovatis acutis divaricatis labelli laciniâ intermediâ productiore.

I figure this little plant more for the sake of recording its existence, than from any expectation that it will ever become an object of horticultural interest; for since *C. elegans*, a far hardier and more cultivable plant, has disappeared, there can be little hope that this, beautiful as it is, will be preserved.

It only exists at present in the Garden of the Horticultural Society, where it was sent from California by Mr. Douglas. It is there treated as a tender annual, and every year a small number of tiny plants, not at all bigger than those now represented, have been raised from the very few seeds ripened the previous year. It has been usually grown in a flower-pot.

The wild Californian specimens shew this to be a much smaller plant, even wild, than C. elegans; from which it differs in its leaves being more obtuse, and its flowers, which are twice as large, having the upper segments diverging not parallel, the middle lobe of the lower lip longer than the others, and the broad lobed white spot in its middle richly stained with yellow at the base.

Seeds are the only means which this plant has of propagating itself.





## \* CRATÆGUS mexicána.

Mexican Hawthorn.

ICOSANDRIA MONO-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

C. mexicana; foliis ovalibus acutis serratis aut apice incisis subtùs tomentosis, floribus corymbosis, calycinis lobis acutis tomentosis, bracteis filiformibus ramentaceis, pomis sphæroideis 3-5-pyrenis.

C. mexicana. D. C. Prodr. 2. 629. Sweet's Flower Garden, 2 ser. t. 300.

Loudon, Arb. Brit. p. 843. and fig. 617. p. 867.

Arbor, in locis temperatis sempervirens, foliis duris sublucidis, aliquando in ramis vegetioribus trilobis. Stipulæ lineari-lanceolatæ, ramentaceæ, margine glandulosæ, petiolis longiores. Fructus lutei, sapidi.

A native of the Tierra fria of Mexico, whence I have wild specimens gathered by Mr. Graham. It is a small tree, which in mild climates is quite evergreen, with lanceolate sharply serrated rather shining deep green leaves. The flowers are almost as large as those of some kinds of Pear, and, appearing as they do in abundance from the rich green bosom of the leaves, produce a striking effect. The fruit is in some estimation among the Mexicans, but it has not much merit.

Mr. Loudon states that, if budded upon the common Hawthorn, this plant will produce shoots from 5 to 7 feet long the first season. It may be easily propagated by this process, and will therefore soon be common. It is quite hardy, but succeeds best if allowed to grow in front of a wall, or in some equally sheltered place.

<sup>\*</sup> See fol. 1161.







## \* ONCÍDIUM iridifólium.

Pigmy Oncidium.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Vandeæ.

ONCIDIUM.—Suprà, vol. 13. fol. 1050.

C. iridifolium; foliis ensiformibus brevibus equitantibus, scapo simplici subunifloro, sepalo supremo obtuso: lateralibus acutis collateralibus (herbaccis), petalis obtusis undulatis majoribus, labelli lobis lateralibus parvis subrotundis unguiculatis: intermedio multò majore subrotundo bilobo utrinque versus apicem emarginato, cristà (depressà 5-lobà apice truncatà), columnæ alà crenulatà circumdante. Gen. § Sp. Orch. 203.

Folia nunc equitantia, nunc explanata, semper acuta. Crista labelli apice truncata crenulata, basi disciformis, lobulis duobus in vertice disci.

This curious little species of Oncidium seems to be common in many of the hotter parts of America; for it has been found from Mexico, New Grenada, and Surinam, as far south as Brazil. M. Descourtilz, in his manuscript account of Brazilian Orchideæ, observed it in the neighbourhood of the town of Bom Jesus de Bananal in the province of St. Paul's, growing exclusively upon the branches of Orange and Lemon trees; it was very abundant there, and constantly preferred dry places exposed to the sun.

The specimen from which the accompanying drawing was taken was sent me by Lord Fitzwilliam's desire, from the rich collection at Wentworth, in August, 1835.

The outline figure at the bottom of the plate represents the column, with its two serrated wings, and the lower part of the lip, with the tuberculated disk, by which the species of Oncidium are remarkably well distinguished.

<sup>\*</sup> See folio 1542.



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# \* CRATÆGUS glandulósa $\beta$ . macracantha.

Long-spined glandular Hawthorn.

#### ICOSANDRIA MONO-PENTAGYNIA.

Nat. ord. Rosaceæ, § Pomeæ. CRATÆGUS.—Suprà, vol. 13. fol. 1128.

A fine handsome vigorous American thorn, forming a tree with a spreading head, and having firm dark green leaves, amongst which are intermixed stout curved spines of unusual length. I have seen them as much as four inches and a half long. It flowers in May, and produces an abundance of its deep vermilion-red haws in the autumn.

No writer upon the wild trees of North America notices this remarkable plant; it is therefore in all probability of garden origin; indeed I entertain no doubt of its being a mere variety of C. glandulosa, possibly of hybrid extraction, between that species and C. crus-galli.

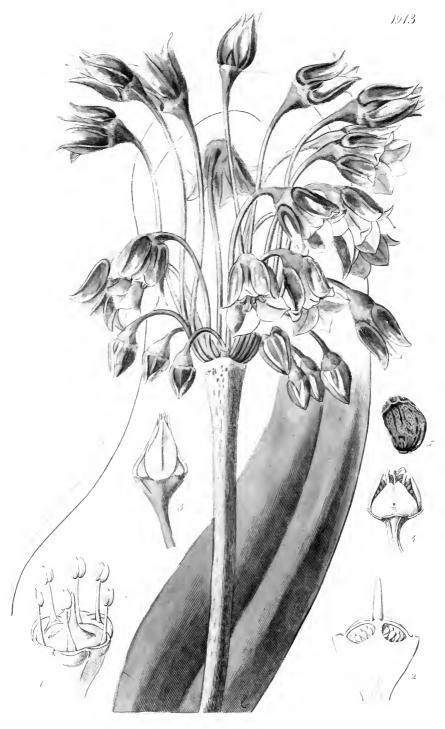
C. glandulosa; foliis subrotundis oblongisve inciso-serratis basi cuneatis longè petiolatis, calycis laciniis pinnatifidis glandulosis, spinis axillaribus arcuatis petiolis longioribus, pomis sphæricis corymbosis 3-pyrenis putamine crassissimo osseo.

C. glandulosa; De Cand. Prodr. 2. 627. &c. Loudon Arb. Brit. p. 817. fig. 567.

B. mucracantha; spinis foliis æqualibus v. longioribus, pomis subminoribus.
 C. macracantha; Lodd. cat. Loudon Arb. Brit. p. 819. fig. 572. et 573.

<sup>\*</sup> See fol. 1161.





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## \* NECTAROSCÓRDUM sículum.

Sicilian Honey-garlic.

#### HEXANDRIA MONOGYNIA.

Nat. ord. LILIACEÆ, § SCILLEÆ.

NECTAROSCORDUM. Flores umbellati. Sepala et petala diversiformia, semi-herbacea, valdè imbricata. persistentia, demùm cartilaginea et supra capsulam rigidè conniventia. Staminu 6, perigyna; filamentis liberis subulatis. Ovarium in apice pedicelli clavati semi-immersum, depressum, poris tribus mellifluis in vertice dissepimentorum crassissimorum; polyspermum, ovulis e fundo loculorum. Capsula sepalis petalisque persistentibus supertecta, ovata, loculicidò trivalvis, pori melliflui vestigio in dorso. Semina compressa, atra.—Herba bulbosa, allium fortissimè olens. Pedicelli florum cernui, capsularum rigidi erecti.

N. siculum.

Allium siculum. Ucria pl. ad Linn. op. addend. n. 7. Guss. prodr. fl. sic. I. 398. Don in Sweet Fl. Gard. ser. 2. t. 349.

Sepala et petala lasi valdè imbricata, diversiformia, nempe; sepala ovato-oblonga, obtusc, herbacea, leviter purpurascentia; petala unguiculata, subcordato-ovata, mucronulata, medio purpurascentia, ungue calloso et sulcato. Stamina libera, basi nullo modo connata, omnia conformia. Ovarium loculis petalis alternis, in toro crasso semi-immersis, poro depresso mellifluo in vertice dissepimentorum crassissimorum. Ovula in basi loculorum aggregata, quatuor per paria pone axin, quatuor pone ambitum serie simplici. Capsula receptaculo crassissimo inserta, sepalis petalisq. induratis obtecta, hemisphærico-trigona, lævis; dorso loculorum elevato, poro mellifluo depresso.

A bulbous plant found wild in shady woods on the mountains of Polizzi, Madonie, Ficuzza, S. Maria del Bosco, in Sicily, flowering in May and June.

It has been hitherto referred most unaccountably to the genus Allium, with which it agrees indeed in having an

<sup>\*</sup> From  $\nu_{\epsilon\kappa} r a \rho$  honey, and  $\sigma_{\kappa} o \rho \delta \sigma \nu$  garlic, in allusion to the honey pores in its flowers.

umbellate inflorescence, and a powerful garlic-like odour, but in hardly any other respect more than Ornithogalum, and the other genera of the Liliaceous order. The characters assigned to it are amply sufficient to fix it as a most distinct and remarkable genus.

Gussone inquires whether A. Dioscoridis may not be the same species; a question that I believe there is no present means of answering.

It is a hardy species, my drawing of which was made from a plant in the Garden of the Society of Apothecaries at Chelsea, in June last. It produces seeds, by which the curator, Mr. Anderson, will, I presume, be able to increase it.

In the accompanying dissections, 1. represents an ovary surrounded by stamens, the calyx and corolla having been cut away; 2. is a section of the ovary indicating the position of the ovules; 3. is a ripe fruit invested by the permanent calyx and corolla; 4. is a capsule with its valves opening; 5. is a seed.





## \* BRASAVÓLA cordáta.

Heart-lipped Brasarola.

GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Epidendreæ. BRASAVOLA.—Suprà, vol. 17. fol. 1465.

B. cordata; labello cordato acuminato integerrimo ungue parum longiore, sepalis petalisque linearibus acuminatis, clinandrio integerrimo postice in dentem subulatum producto.

A species of Orchidaceous plant, closely allied to B. nodosa, already figured at fol. 1465 of this work, from which it differs in its flowers being only half the size, with a cordate labellum, and a very different clinandrium.

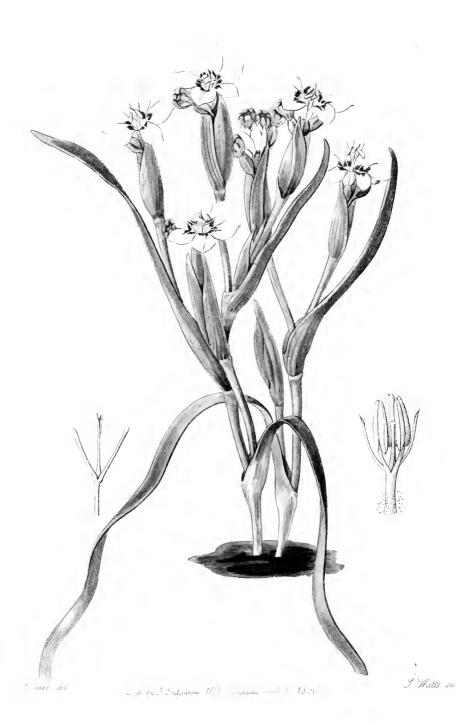
It was imported from Brazil by Messrs. Loddiges, who obligingly furnished me with the specimen from which the drawing was made in January 1836.

There will be no certainty in the cultivation of epiphytal Orchidaceæ till we become more precisely acquainted with the habits of the different species than we now are. At present it is usual to consider them all natives of trees in damp shady woods. It is however quite certain that such is the habit of only some of them. The whole genus Brasavola, for example, grows upon stones and rocks, never upon trees, in open forest glades, fully exposed to the sun.

It is not a little remarkable that no species of this genus should occur in the extensive series of drawings of Brazilian Orchidaceæ by M. Descourtilz, with which Baron Delessert has favoured me. Neither indeed do more than two species exist in Dr. Von Martius's extensive Brazilian Herbarium, one of which is Br. tuberculata, and the other the following new species.

B. Martiana; labello ovali acuminato ciliato-dentato sessili, petalis sepalisque lineari-lanceolatis acuminatis longioribus, clinandrio cucullato inciso.——Brazil, on the banks of the Rio Negro, Martius.—Leaves subulate, channelled, 1½ foot long. Flowers white.—Next B. cucullata.





# \* SISYRÍNCHIUM graminifólium, β. pumilum.

Dwarf Grass-leaved Sisyrinchium.

MONADELPHIA TRIANDRIA.

Nat. ord. Iridaceæ.
SISYRINCHIUM.—Suprà, vol. 13. fol. 1067.

S. graminifolium. Supra 1. c.

A beautiful little perennial, found on mountains near Valparaiso and Conception, where it flowers in October. I have wild specimens both from Mr. Macrae and Mr. Bridges. It is a much more attractive plant than the other variety figured at fol. 1067 of this work, because of the deep purple spots at the base of the divisions of its flower, and might be almost considered a different species, but there do not appear to be any characters to distinguish it with certainty.

For the specimens from which the figure was taken I am indebted to Robert Mangles, Esq. with whom the plant flowered in May last. It will probably be treated as a greenhouse plant, but it is undoubtedly one of those species which would succeed better in a situation protected from frost and damp in winter, but without any artificial heat. Considering how very large a number of beautiful plants we have that would grow in all their native beauty under such circumstances, it is not a little remarkable that none of the many wealthy cultivators of flowers should yet have thought of constructing moveable glass-houses, that should be only

β. pumilum; scapo submonostachyo foliis breviore, pilis ovarii longissimis, floribus oculatis.

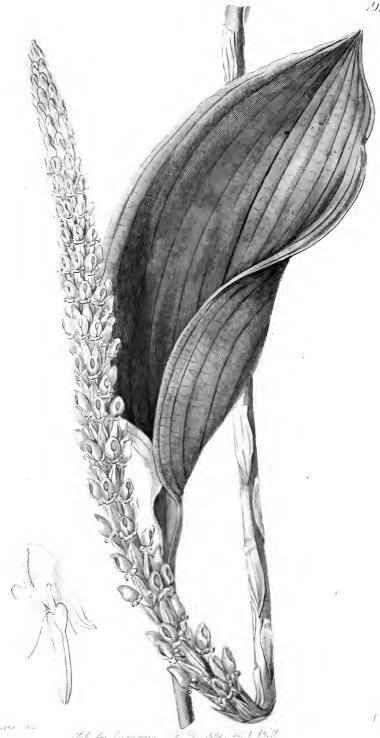
<sup>\*</sup> Σισυρίγχιον is an old Greek name for the Iris Sisyrinchium.

erected during winter, and totally removed after the end of the frosts in spring. A thousand pounds so expended would produce a far greater result than three thousand applied in the common manner; and the annual cost of keeping such houses in order would be nothing as compared with the expense of greenhouses and stoves.

This is one of those perennials with succulent, fingered roots which multiply sparingly. It is chiefly to its seeds that we must look for the means of propagating it.







1 Watts an

## \* PRESCÓTTIA colórans.

## Purplish Prescottia.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Neottieæ.

PRESCOTTIA. Lindl. Sepala reflexa, basi paululum connata. Petula minora, reflexa aut erecta. Labellum erectum, posticum, cucullatum, carnosum, integerrimum. Columna nana, teres, aptera, libera, clavata. Anthera opercularis, rotundata, loculis completis divarieatis, connectivo carnoso. Stigma obtusum. Pollinia 4, geminata.

P. colorans; folio solitario ovato-oblongo acuminato basi cucullato petioli longitudine, spicâ densâ cylindraceâ, petalis subulatis ascendentibus. Scapus bipedalis, glauco-purpurascens.

A native of Brazil, whence it was imported by Messrs. Loddiges. The drawing was made in January 1834.

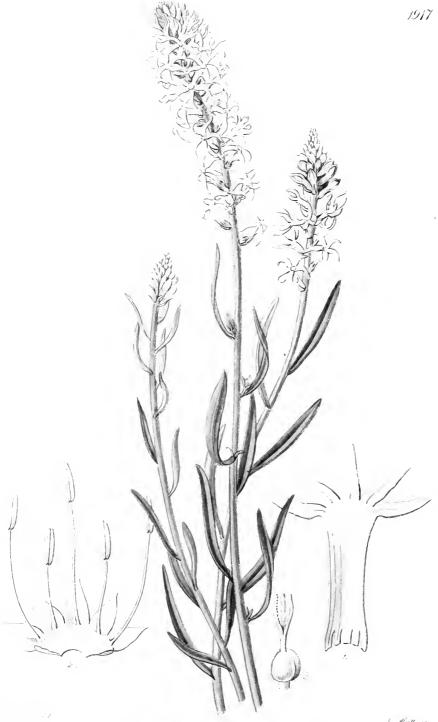
It is a stove herbaceous plant, growing readily in sandy peat, flowering in its season, and then dying down for the remainder of the year.

Little is as yet known about the species of this genus; the following certainly belong to it, besides P. plantaginea.

- 1. P. stachyodes. = Cranichis stachyodes. Swartz Prodr. 3. 1437.
- P. petiolaris; foliis latis ovato-lanceolatis ovalibusque petiolo brevioribus, spicâ densissimâ elongatâ multiflorâ, petalis sepalisque revolutis.——Peru Mathews (No. 1875).——Principally distinguished from P. plantaginea by its widely different leaves.

<sup>\*</sup> Named in compliment to John Prescott, Esq. of St. Petersburgh, a learned and indefatigable botanist, with whose attainments it is to be regretted that the public should not be as well acquainted as his personal friends.

- 3. P. micrantha; foliis ovatis subsessilibus rosulatis, scapo erecto filiformi subaphyllo, spicâ nutante pauciflorâ, bracteis subulatis ovario multò brevioribus, sepalis petalisque patulis.——Brazil, Sierra d'Estrella, Dr. Griesbach.——Scapus palmaris. Flores minuti.
- P. leptostachya; folio oblongo acuto petiolo longiore, scapo subaphyllo, spicâ
  gracili rariflorâ, bracteis brevissimis subulatis, petalis sepalisque revolutis.
  ——Bahia, in fruticetis sabulosis, Salzmann.



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# \* STACKHOÚSIA monógyna.

Pink-tipped Stackhousia.

PENTANDRIA MONOGYNIA.

Nat. ord. Stackhousiaceæ.

STACKHOUSIA. Smith. Genus solum adhuc notum in ordine.

S. monogyna; foliis lineari-lanceolatis lanceolatisque, spicis cylindraceis elongatis apice acutè conicis, corollæ laciniis acutatis, staminibus inæqualibus, coccis oblongis corrugato-areolatis, bracteis brevissimis membranaceis.
 S. monogyna. Lab. Nov. Holl, 1. t. 104.

Planta herbacea, perennis, pedalis et ultra; caule folioso, ramoso, subdecumbente, glaberrimo, striato. Folia lineari-lanccolata, et lanceolata, nullo modo carnosa, basi acuminata. Spicæ densæ, semper apice roseo conico acuto, nunc per luxuriem foliis quibusdam intermixtæ, post anthesin valdè elongatæ. Bracteæ acuminatæ, membranaceæ, calyce breviores. Calyx 5-fidus, campanulatus, corolla multoties brevior; tubo carnoso, discum adhærentem gerente, laciniis acuminatis. Corolla pseudo-monopetala, petalis in tubum cylindraceum concretis basi liberis, limbo plano acutato. Stamina 5, inæquilonga, tubo breviora, in fauce calycis inserta extra discum. Ovarium trilobum, monostylum, stigmatibus tribus linearibus ercctis, tubo corollæ multò brevioribus vix calycem longitudine superantibus.

A pretty neat herbaceous plant, native of Van Diemen's Land, whence its seeds were sent by Mr. James Backhouse to his brothers at York, where it flowered for the first time in April of the present year. I have wild specimens of it collected in the same island by Mr. Gunn (69) and others.

It is interesting as forming the type of a very small natural order bearing its own name, concerning which the

<sup>\*</sup> So named in honour of the late John Stackhouse, Esq. F.L.S. of Pendarvis in Cornwall, author of a splendid work on submarine plants, entitled "Nereis Britannica," and of some botanical illustrations of Theophrastus.—

Smith.

reader is referred to the Natural System of Botany, page 118. ed. 2.

It will be a half-hardy perennial, and may no doubt be propagated by cuttings of the woody base of its stem, if it should not produce seeds. The pink tips to the spikes of white flowers are striking enough before the flowering is too much advanced.

Hitherto only two species of Stackhousia have been mentioned; namely, S. viminea of Smith, and that now described. Characters of three others in my herbarium are given below.

Fig. 1. in the dissections of this plate represents the 5 petals adhering in a tube, except just at the base where they separate; fig. 2. is the calyx split open, with the fleshy disk lining its tube, and the 5 stamens, of which 2 are alternately shorter than the others; fig. 3. is the ovary, with the style and 3 stigmas.

<sup>3.</sup> S. obtusa; foliis lineari-lanceolatis mucronatis, spicis cylindraceis (brevibus?) et corollæ laciniis obtusis, staminibus inæqualibus, coccis . . . ., bracteis acuminatis calyci æqualibus.—Van Diemen's Land (Gunn, 462.)——Very near S. monogyna.

<sup>4.</sup> S. muricata; foliis linearibus carnosis obtusis, racemis gracilibus aphyllis, pedunculis ternis, corollæ laciniis linearibus obtusis, staminibus . . . . , coccis truncatis muricatis inæqualibus, bracteis obsoletis.——Port Jackson-Flowers very small.

<sup>5.</sup> S. nuda; aphylla? ramis filiformibus apice racemum pauciflorum gerentibus, pedunculis 3-4-nisve, corollæ laciniis acuminatis, staminibus æqualibus, coccis..., bracteis obsoletis.——New Holland. Flowers not half the size of the last. Whole plant apparently leafless.





# \* GENÍSTA monospérma.

Single-seeded Genista.

DIADELPHIA (MONADELPHIA), DECANDRIA.

Nat. ord. Fabaceæ or Leguminosæ, § Papilionaceæ. GENISTA.—Suprà, vol. 14. t. 1150.

G. monosperma; ramis virgatis teretibus striatis floriferis nudis junioribus foliisque angustè linearibus simplicibus sericeis, racemis lateralibus, (floribus albis), leguminibus ovalibus monospermis glaberrimis subinflatis. Gussone fl. sic. 2. 363.

Spartium monospermum. Linn. sp. pl. 995. Bot. Mag. t. 683.

Genista monospernia. DC. prodr. p. 150.

One of the most deliciously fragrant shrubs in the world. It is difficult to imagine any thing more delicate and grateful than the sweet odour that its tender snow-white blossoms diffuse in the conservatory, in the months of May and June.

It is described as being, when wild, a good deal taller than a man, having a trunk an inch thick, and waving its green gray leafless thread-like branches in the wind in the most graceful manner. All along the basin of the Mediterranean, as high as the latitude of Sicily, it is abundant; but it cannot bear the cold of the French shore. At Gibraltar, in a sandy barren soil, and close upon the sea-beaten rocks, it is loaded with blossoms in February; along the Barbary coast; in Sicily from Alicata to Spaccaforno, and in Greece it occurs in similar situations; and finally it gains its eastern limits in the desert of Mount Sinai, where the Arabs call it Retam.

<sup>\*</sup> Of doubtful meaning. It is said to be derived from genu the knee, hecause the branches are flexible like the knee joint. The Genistæ lentæ of Virgil are generally referred to Spartium junceum.

It bears no little resemblance to the Retama of Teneriffe, Cytisus nubigenus, and will doubtless be one day associated in the same genus with that species, whenever Botanists shall discover the true mode of grouping the European genera of Papilionaceous plants.

The accompanying figure was taken from a specimen that flowered with Messrs. Young of Epsom, in May 1835. It is multiplied by seeds and cuttings, and must be treated as a greenhouse plant in winter. It is another of those plants which might be successfully managed in a moveable temporary glass-house.





# \* CÁTTLEYA intermédia; var. pallida.

Pale-flowered intermediate Cattleya.

#### GYNANDRIA MONANDRIA.

Nat. ord. Orchidaceæ, § Еріdendreæ. CATTLEYA.—Suprà, vol. 11. fol. 953.

C. intermedia; foliis oblongis emarginatis cauli æqualibus, sepalis petalisque lineari-oblongis subæqualibus subundulatis obtusiusculis, labello trilobo lamellis pluribus in medio carnosis cristato: laciniis lateralibus ovatis obtusius planiusculis intermedio crispo rotundato denticulato.
a. floribus roseis.

C. intermedia. Graham in Bot. Mag. t. 2851. Gen. et Sp. Orch. p. 117. \( \beta \). floribus subalbis rubescentibus, disco labelli sanguineo.

This very pretty Cattleya was imported from the Brazils some years since by the Horticultural Society, in whose Garden the drawing was made so long since as June 1834. The mixture of white and crimson in its flowers gives it a beautiful appearance, and renders it much more interesting than the original variety, which is too like C. Loddigesii.

The only wild specimens I am acquainted with are in Sir Wm. Hooker's Herbarium, collected near Buenos Ayres by Mr. Tweedie, and sent home with the following note:—
"This is by far the handsomest of the tribe in this country, and grows equally well on the sea-beaten rock, and the moss-covered tree in the heart of the forest. It is to be found in bloom at all seasons. There are many varieties of it; their colour pink and crimson." I suspect, however, that Mr. Tweedie confounds different things, and that several species of Cattleya are to be found in the neighbourhood of Buenos Ayres. One at least I am able to describe

<sup>\*</sup> See folio 1172.

below, and I avail myself of the same opportunity to characterise two or three others with which I am acquainted. Beautiful as are C. labiata, crispa, and Loddigesii, C. coccinea and bicolor described below, are not at all inferior to them, and moreover there is in the possession of Messrs. Loddiges a very distinct crimson-flowered *fragrant* species, found in British Guiana by Mr. Schomburgh, with which I have not sufficient acquaintance to define it.

- C. ovata; foliis binis ovatis obtusis caule cylindraceo longioribus (?) sepalis petalisque lanceolatis acuminatis, labello nudo trilobo laciniis lateralibus apice intermediâque oblongâ obtusà denticulatis undulato-crispis.——St. Catharine's, Brazil (Mr. Hindes).——A very fine species in the way of C. labiata.
- C. bicolor: foliis oblongo-loratis caule tereti elato triplò brevioribus, sepalis lanceolatis falcatis acutis, petalis parum latioribus subundulatis obtusis, labello indiviso plano apice dilatato rotundato crenato convexo.—Brazil, Descourtilz in Bibl. Deless. t. 49.—Stems 2-3 feet long. Sepals and petals tawny; labellum bright purple, with a lanceolate streak in the centre, white slightly spotted with purple. The flowers are slightly fragrant.
- C. maritima; foliis binis ovalibus obtusis spatha parum longioribus, caule subclavato, sepalis oblongis acutis, petalis lanceolatis falcatis obtusis, labello trilobo (nudo?); laciniis lateralibus erectis rotundatis intermediâ dilatatâ denticulatâ emarginatâ.——Sea-beaten rocks, Buenos Ayres, (Tweedie, in herb. Hooker.) Flowers fine, rose-coloured, usually in threes; many varieties. Its small leaves sufficiently mark this, of which I have only seen one specimen.
- C. coccinea; foliis solitariis oblongis acutis caulibus ovalibus teretibus longioribus, floribus solitariis, spathâ nullâ, sepalis lineari-oblongis obtusis rectis, petalis triplò latioribus, labello ovato basi cucullato indiviso apice plano sepalis breviore.—Brazil, Descourtitz in bibl. Deless. t. 10.—Stems 2 or 3 inches high. Flowers bright scarlet, 3 inches across. A most remarkable and beautiful species.
- C. Harrisoniana (Bateman in litt.); foliis angustè lanceolatis, racemo 1-4-floro, sepalis petalisque patentibus his subrotundo-ovalibus, labello subtrilobo verrucoso. Bateman.—Brazil, Mr. Harrison.—Very near C. Loddigesii.

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		——— Tussilaginis	18 . 1550
Ranunculus creticus, var. macr		Serapias cordigera, var. longipetala	14 . 1189
phullus Raphiolepis rubra Reevesia thyrsoidea Renanthera coccinea Rhodanthe Manglesii Rhodochiton volubile	17 . 1432	Silene laciviata Sinningia villosa Sisyrinchium grandiflorum	17 . 1444
Raphiolepis rubra	17 . 1400	Sinningia villosa	-14.1131
Reevesia thyrsoidea	15 . 1236	Sisyrinchium grandifforum	$13 \cdot 1364$
Renanthera coccinea .	14 . 1131		
Rhodanthe Manglesii .	20 . 1703	pumilum	22 . 1915
Rhodochiton volubile .	21 . 1755	———— odoratissimum	15.1283
Milododendron Alta-ciereuse	17 . 1414	Solandra guttata	18 . 1551
arboreum, var		Solanum crispum	18 . 1516
roseum	15 . 1240	——— etuberosum .	20 . 1712
arboreum, var		Sollya heterophylla Sophora velutina Soulangia rubra Sparaxis pendula	17 . 1466
	20 . 1684	Sophora velutina	<b>14 . 11</b> 85
———— Cartons .	17 . 1449	Soulangia rubra	<b>18</b> • 1498
———— pulcherrimum	21 . 1820	Sparaxis pendula	16.1360
Ribes cereum	15 , 1263	Spermadictyon azureum .	15 · 1235
- divarieatum	<b>16</b> . 1359	Sphacele campanulata .	<b>16.138</b> 2
—— inebrians	17 . 1471	Sphærostema propinquum .	20 <b>. 1</b> 688
— niveum	20 . 1692	Sphenotoma capitatum .	18 . <b>1</b> 515
punctatum	26 . 1658	Spiræa ariæfolia	<b>16.136</b> 3
sanguineum	16 . 1349	chamædrifolia .	15 . 1222
setosum	15 . 1237	Stachys albicaulis	<b>18</b> . <b>155</b> 8
mibes cereum divaricatum divaricatum inebrians niveum punctatum sanguineum setosum tenniflorum Rondeletia odorata Rose Clare Rosa multiflora, var. platuphulla	18 . 1557	germanica, var. pubescens —— inflata —— Salviæ	15.1289
tenuiflorum	19 . 1574	——— inflata	20 . 1697
Rondeletia odorata	22 . <b>1</b> 905	——— Salviæ	15 . 1226
Rose Clare	17 . 1438	Stackhousia monogyna .	22 . 1917
Rosa multiflora, var. platyphylla	16 . 1372	Stanhopea eburnea	18 . 1529
—— Ruga	16 . 1389	insignis	22 . 1837
Rubus nutkanus	16 . 1368	oculata	21 . 1800
roridus	19.1607	Stapelia Gussoneana	20 . 1731
spectabilis	17 . 1424	Statice puberula	17 . 1450
Ruellia Sabiniana	15 . 1238	Stemodia chilensis	17 . 1470
Russellia juncea	21 . 1773	Stemodia chilensis Stenactis speciosa	19.1577
•		Sterculia lanceolata	15 . 1250
Saccolabium papillosum .	18 . 1552	Tragacantha .	16 . 1353
Sagittaria angustifolia .	14 . 1141	Stigmaphyllon aristatum .	20 . 1659
Salpiglossis atropurpurea .	18 . 1518	Streptocarpus Rexii .	14.1173
Salvia angustifolia	18 , 1554	Stylidium fasciculatum .	17 . 1459
foliosa	17 . 1429	Syringa Josikæa	20.1733
fulgens	16 . 1356	,	
Grahami	16 . 1370	Tabernæmontana densiflora	15 . 1273
involucrata	14 . 1205	Tacsonia pinnatistipula .	18 . 1536
Sarcanthus guttatus .	17 . 1443	Talauma Candollii	20 . 1709
Sarvia angustiona	22 . 1832	Tellima granditlora	14 . 1178
Sauroglossum elatum .	19.1618	Teucrium orchideum .	15 . 1255
Scaphyglottis violacea .	22 . 1901	Thermopsis fabacea	15 . 1272
Schizanthus pinnatus, var. humil	lis 18 . 1562	Thryallis brachystachys .	14 . 1162
retusus .	18 . 1541	Tillandsia acaulis	14 , 1157
Scilla plumbea	16 . 1355	rosea	16 , 1357
Scilla plumbea	22 . 1878	Thermopsis fabacea Thryallis brachystachys Tillandsia acaulis ————————————————————————————————————	16 . 133B

	Vol. Folium		Vol. Folium
Trachymene cœrulea .	15 . 1225	Verbena multifida contracta	21 . 1766
Tradescantia undata		sulphurea	21 . 1748
Trichopetalum gracile .	18 . 1535	Vernonia axillifora	17 . 1464
Trichopilia tortilis	22 · 1863	Viburnum cotinifolium .	19.1650
Trifolium fucatum	22 . 1883	Villarsia reniformis .	18 . <b>1</b> 533
vesiculosum .	<b>17.14</b> 08	Viola præmorsa	15 . 1254
Tristania macrophylla .	22 <b>. 1839</b>	•	
Triteleia laxa		Westringia longifolia .	18 . 1481
Tritoma Burchelli	21 . 1745	, and a	
Tropæolum pentaphyllum	18 . 1547	Xerophyllum setifolium .	19.1613
Tulipa Oculus solis, var. persic	a 14 . 1143		
Oculus solis, var. præc		Yucca Draconis	22.1894
Tupistra nutans	15 . 1223	——— flaccida	22 . 1895
Turræa pinnata	17 . 1413	——— superba	20 <b>. 1</b> 690
Illan manistaidas	17 . 1452	Zanhuwanthas masashlas	16 1961
Ulex genistoides	17 . 1452	Zephyranthes mesochloa .	16 . 1361
NT	40 4054	Spofforthiana	
Vaccinium ovatum		Zinnia violacea, var. coccinea	
Vanda teres	21 . <b>1</b> 809	Zygopetalum cochleari	22 . <b>1857</b>
Verbena Melindres .	14.1184		

THE END.

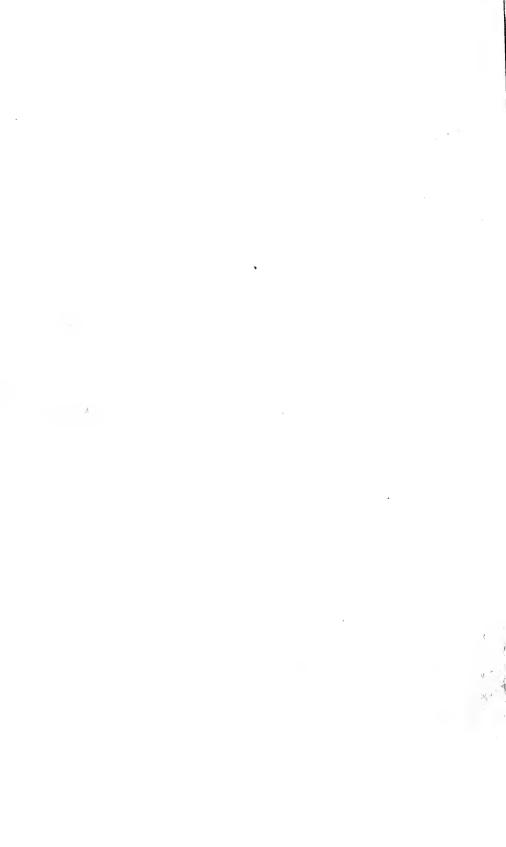
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